

# **Advancement Handbook for Aviation Support Equipment Technician**

**This Advancement Handbook was last revised on 21 May 1999.**

## PREFACE

The purpose of the Advancement Handbook is to help you focus your preparation for Navywide advancement-in-rating examinations. The bibliographies (BIBs) together with this handbook form a comprehensive examination study package. Since this handbook provides skill and knowledge components for each paygrade of the AS rating, it helps you concentrate your study on those areas that may be tested. This feature will help you get the most out of your study time.

Each page in Parts 1 through 4 of this Advancement Handbook presents general skill areas, specific skill areas, the knowledge factors associated with each skill area, the pertinent references that address each skill, and the subject areas that may be covered on the examination. The skill statements describe the skills you are expected to perform for each paygrade. The skill statements are cumulative; that is, you are responsible for the skills for the paygrade you are competing for, your present paygrade, and all paygrades below.

Although this handbook is very comprehensive, it cannot cover all the tasks performed in the rating. As a result, the advancement examinations may contain questions more detailed than described in the “*Exam Expectations*” Section of the skill areas.

Remember that advancement competition is keen, so your keys to advancement include not only comprehensive advancement examination study but also sustained superior performance.

Prepared by  
Navy Advancement Center Department,  
Naval Education and Training Professional  
Development and Technology Center

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## Part 1

### Advancement Handbook for AS3

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Mechanical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Steering and Suspension Systems
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Steering system alignment</li> <li>• Steering system components</li> <li>• Steering system geometry</li> <li>• Steering system operation</li> <li>• Steering system types</li> <li>• Hydraulic steering systems</li> <li>• Hydraulically assisted steering systems</li> <li>• Procedures for replacement of steering system components</li> <li>• Suspension system components</li> <li>• Suspension system operation</li> <li>• Suspension system types</li> <li>• Procedures for replacement of suspension components</li> <li>• Procedures for diagnosing steering and suspension system malfunctions</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Air Conditioner, Aircraft Ground Cooling, A/M32C-21, Work Packages 003 and 008 (AG-180AO-MMM-000)</li> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-35, Work Packages 003, 004, 005, 006, 013, and 014 (NAVAIR 19-25G-19)</li> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-36, Work Packages 003, 004, 005, 006, 013, 014, 015, and 016 (AG-310DO-OMM-000)</li> <li>• Aircraft Ground Support Equipment Towing Tractor, Type A/S32A-30, Work Packages 003, 006, 013, 014, 015, 027, and 028 (NAVAIR 19-40-45)</li> </ul>

	<ul style="list-style-type: none"> <li>• Aircraft Mid-Range Tow Vehicle, Type A/S32A-42, Chapters 1, 7, and 9 (NAVAIR 19-40-522)</li> <li>• Aircraft Towing Tractor, A/S32A-31A, Work Packages 003, 006, 021, 023, and 025 (NAVAIR 19-40-521)</li> <li>• Aircraft Towing Tractor, A/S32A-37, Work Packages 003, 006, 018, 022, and 023 (NAVAIR 19-40-519)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapters 2 and 8 (NAVEDTRA 12385)</li> <li>• Basic Machines, Chapters 10 and 11 (NAVEDTRA 12199)</li> <li>• Dummy Load, Electrical, DA-675/MSM, Work Packages 003 and 006 (NAVAIR 17-15BA-241)</li> <li>• Fire Fighting Vehicle, A/S32P-25, Work Packages 003, 006, 007, 010, 011, 013, 014, and 015 (NAVAIR 19-25-514)</li> <li>• Fluid Power, Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12, (NAVEDTRA 12964)</li> <li>• Jet Aircraft Start Unit, A/M47A-4, Work Packages 003 and 007 (NAVAIR 19-105B-59)</li> <li>• Mobile Air Conditioning Unit, Model A/M32C-17, Section 5 (NAVAIR 19-60-87)</li> <li>• Mobile Electric Power Plant, Model NC-2A, Sections 1, 2, and 3 (NAVAIR 19-45-10)</li> <li>• Mobile Electric Power Plant, Type MMG-1A, Work Package 016 (NAVAIR 19-45-19)</li> <li>• Portable Floodlight Set, A/M42M-2, Work Packages 003 and 008 (NAVAIR 19-10-504)</li> <li>• Portable Hydraulic Power Supply, A/M27T-5, Work Packages 003, 021, and 024 (NAVAIR 17-15BF-89)</li> <li>• Portable Hydraulic Power Supply, A/M27T-7, Work Packages 003 and 015 (NAVAIR 17-15BF-91)</li> <li>• Power Plant, Mobile Electric, Models NC-10C and NC-10B-1, Sections 1, 2, and 5 (NAVAIR 19-45-20)</li> <li>• Power Plant, Mobile Electric, Models NC-8A and NC-8A-1, Sections 1 and 5 (NAVAIR 19-45-9)</li> </ul>
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	<ul style="list-style-type: none"> <li>• Support Equipment &amp; Aircraft Towing Tractor, A/S32A-30A, Sections 1, 2, 4, and 5 (NAVAIR 19-40-520)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about steering and suspension system operation and maintenance. They will include types of steering and suspension systems, component functions and operation, procedures for replacing components, hydraulic functions and operation in a steering system, steering and suspension system geometry, alignment procedures, and troubleshooting steering and suspension systems. The questions may be of a general nature or specific to a type of equipment.</p>

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Mechanical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Brake Systems
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Types of brake systems</li> <li>• Brake system components</li> <li>• Brake system operation</li> <li>• Procedures for brake system adjustment</li> <li>• Procedures and equipment for brake system bleeding</li> <li>• Procedures for repair and replacement of brake system components</li> <li>• Procedures and materials for cleaning brake systems</li> <li>• Procedures for diagnosing brake system malfunctions</li> <li>• Procedures and materials/fluids for servicing brake systems and brake system components</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Air Conditioner, Aircraft Ground Cooling, A/M32C-21, Work Package 008 (AG-180AO-MMM-000)</li> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-35, Work Packages 003, 004, 006, 013, 016, 017, 029, and 032 (NAVAIR 19-25G-19)</li> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-36, Work Packages 003, 004, 005, 006, 012, 013, 018, 019, 024, and 031 (AG-310DO-OMM-000)</li> <li>• Aircraft Ground Support Equipment Towing Tractor, Type A/S32A-30, Work Packages 003, 005, 006, 012, 025, and 026 (NAVAIR 19-40-45)</li> </ul>



	<ul style="list-style-type: none"> <li>• Aircraft Mid-Range Tow Vehicle, Type A/S32A-42, Chapters 1 and 8 (NAVAIR 19-40-522)</li> <li>• Aircraft Towing Tractor, A/S32A-31A, Work Packages 003, 005, 006, 016, 024, and 025 (NAVAIR 19-40-521)</li> <li>• Aircraft Towing Tractor, A/S32A-32, Work Packages 003 and 019 (NAVAIR 19-1-157)</li> <li>• Aircraft Towing Tractor, A/S32A-37, Work Packages 003, 005, 006, 009, 018, 020, 022, and 023 (NAVAIR 19-40-519)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapters 2 and 8 (NAVEDTRA 12385)</li> <li>• Basic Machines, Chapters 9 and 10 (NAVEDTRA 12199)</li> <li>• Dummy Load, Electrical, DA-675/MSM, Work Packages 003 and 006 (NAVAIR 17-15BA-241)</li> <li>• Fire Fighting Vehicle, A/S32P-25, Work Packages 003, 006, 007, and 016 (NAVAIR 19-25-514)</li> <li>• Fluid Power, Chapters 2, 3, 5, 7, 10, 11, and 12, (NAVEDTRA 12964)</li> <li>• Jet Aircraft Start Unit, A/M47A-4, Work Packages 003 and 007 (NAVAIR 19-105B-59)</li> <li>• Mobile Air Conditioning Unit, Model A/M32C-17, Sections 1, 4, and 5 (NAVAIR 16-60-87)</li> <li>• Mobile Electric Power Plant, Model NC-2A, Sections 2 and 3 (NAVAIR 19-45-10)</li> <li>• Mobile Electric Power Plant, Type MMG-1A, Work Package 016 (NAVAIR 19-45-19)</li> <li>• Portable Floodlight Set, A/M42M-2, Work Package 008 (NAVAIR 19-10-504)</li> <li>• Portable Hydraulic Power Supply, A/M27T-5, Work Packages 003, 021, and 023 (NAVAIR 17-15BF-89)</li> <li>• Portable Hydraulic Power Supply, A/M27T-7, Work Packages 003, 015, and 018 (NAVAIR 17-15BF-91)</li> <li>• Power Plant, Mobile Electric, Models NC-10C and NC-10B-1, Sections 1, 2, and 5 (NAVAIR 19-45-20)</li> </ul>
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	<ul style="list-style-type: none"> <li>• Power Plant, Mobile Electric, Models NC-8A and NC-8A-1, Sections 1, 2, 4, and 5 (NAVAIR 19-45-9)</li> <li>• Servicing Trailer, Liquid Oxygen, Low Loss, Closed Loop, Type TMU-70/M, Section 4 (NAVAIR 19-25D-26)</li> <li>• Support Equipment &amp; Aircraft Towing Tractor, A/S32A-30A, Sections 1, 3, 4, and 5 (NAVAIR 19-40-520)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about parking brake and service brake system operation and maintenance. They will include types of brake systems, component functions and operation, procedures for replacing components, bleeding and adjusting procedures, cleaning of components, and troubleshooting brake systems. The questions may be of a general nature or specific to a type of equipment.</p>

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Mechanical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Drive Axles and Differentials
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Gear ratios as applied to a drive axle</li> <li>• Purpose and operation of a drive axle/differential</li> <li>• Purpose and operation of planetary gears in a drive axle</li> <li>• Procedures to repair/adjust a drive axle/differential</li> <li>• Procedures/materials for servicing a drive axle/differential</li> <li>• Procedures to remove and replace a drive axle/differential</li> <li>• Procedures to diagnose a drive axle/differential malfunction</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-35, Work Packages 003, 004, 006, 012, and 032 (NAVAIR 19-25G-19)</li> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-36, Work Packages 004, 006, 012, 014, 025, and 031 (AG-310DO-OMM-000)</li> <li>• Aircraft Ground Support Equipment Towing Tractor, Type A/S32A-30, Work Packages 003, 014, 030, 031, and 032 (NAVAIR 19-40-45)</li> <li>• Aircraft Mid-Range Tow Vehicle, Type A/S32A-42, Chapters 1 and 9 (NAVAIR 19-40-522)</li> <li>• Aircraft Towing Tractor, A/S32A-31A, Work Packages 003 and 025 (NAVAIR 19-40-521)</li> <li>• Aircraft Towing Tractor, A/S32A-32, Work Packages 003 and 018 (NAVAIR 19-1-157)</li> </ul>

	<ul style="list-style-type: none"> <li>• Aircraft Towing Tractor, A/S32A-37, Work Packages 003, 007, 022, and 023 (NAVAIR 19-40-519)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 2 (NAVEDTRA 12385)</li> <li>• Basic Machines, Chapters 6, 11, and 13 (NAVEDTRA 12199)</li> <li>• Mobile Electric Power Plant, Model NC-2A, Section 3 (NAVAIR 19-45-10)</li> <li>• Power Plant, Mobile Electric, Models NC-8A and NC-8A-1, Sections 1 and 5 (NAVAIR 19-45-9)</li> <li>• Support Equipment &amp; Aircraft Towing Tractor, A/S32A-30A, Sections 1, 2, 4, and 5 (NAVAIR 19-40-520)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about drive axle and differential system operation and maintenance. They will include gear ratio principles and functions and the purpose, operation, servicing, removal, replacement, troubleshooting, and repair of drive axles and differentials. The questions may be of a general nature or specific to a type of equipment.</p>

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General AS <i>Skill Area</i>	<b>Mechanical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Transmissions
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Identification of transmissions used in support equipment</li> <li>• Identification and purpose of transmission components</li> <li>• Operation of transmissions and transmission components</li> <li>• Procedures and materials for servicing transmissions</li> <li>• Procedures for adjusting transmission cables and linkages</li> <li>• Procedures for adjusting automatic transmission bands</li> <li>• Procedures for removing and replacing transmissions</li> <li>• Procedures for diagnosing transmission malfunctions</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aircraft Ground Support Equipment Towing Tractor, Type A/S32A-30, Work Packages 003, 006, 016, and 034 (NAVAIR 19-40-45)</li> <li>• Aircraft Mid-Range Tow Vehicle, Type A/S32A-42, Chapters 1 and 5 (NAVAIR 19-40-522)</li> <li>• Aircraft Towing Tractor, A/S32A-31A, Work Packages 003, 005, 006, 014, and 027 (NAVAIR 19-40-521)</li> <li>• Aircraft Towing Tractor, A/S32A-37, Work Packages 003, 004, 006, 007, 010, and 019 (NAVAIR 19-40-519)</li> </ul>

	<ul style="list-style-type: none"> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapters 1 and 2 (NAVEDTRA 12385)</li> <li>• Basic Machines, Chapters 6 and 10 (NAVEDTRA 12199)</li> <li>• Fluid Power, Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 12, (NAVEDTRA 12964)</li> <li>• Support Equipment &amp; Aircraft Towing Tractor, A/S32A-30A, Sections 1, 2, 3, 4, and 5 (NAVAIR 19-40-520)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about transmission operation and maintenance. They will include types, components, operation, servicing procedures, adjustment procedures, removal, replacement, and troubleshooting of support equipment transmissions. The questions may be of a general nature or specific to a type of equipment.</p>

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Mechanical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Diesel Engines
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Types and models of diesel engines used in support equipment</li> <li>• Operation of a diesel engine, including mechanical operation, fuel system, governors, air supply system, exhaust system, cooling system, lubrication system, and cold weather starting system</li> <li>• Component function, location, operation, and relationship with other components</li> <li>• Procedures for replacing and tensioning drive belts</li> <li>• Procedures for removal, replacement, repair, and servicing of diesel engines and components of diesel engines</li> <li>• Procedures for performing diesel engine tune-ups, including valve lash adjustment, injector timing, injector rack adjustment, governor adjustment, injector pump timing, injector testing</li> <li>• Procedures for replacing fuel tanks, replacing fuel lines, flushing fuel tanks, and bleeding air from diesel engine fuel systems</li> <li>• Procedures for diagnosing diesel engine malfunctions, including mechanical malfunctions, fuel system malfunctions, governor malfunction, air supply malfunctions, exhaust malfunctions, cooling system malfunctions, lubrication system malfunctions, and cold weather starting system malfunctions</li> </ul>

<p><i>References you should study to gain the knowledge you need to perform this skill:</i></p>	<ul style="list-style-type: none"> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-35, Work Packages 003, 004, 005, 006, 008, 009, and 011 (NAVAIR 19-25G-19)</li> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-36, Work Packages 004, 005, 006, 008, 009, 010, and 011 (AG-310DO-OMM-000)</li> <li>• Aircraft Mid-Range Tow Vehicle, Type A/S32A-42, Chapters 1, 2, 3, 4, and 6 (NAVAIR 19-40-522)</li> <li>• Aircraft Towing Tractor, A/S32A-31A, Work Packages 003, 005, 006, 007, 010, 012, 013, 014, 017, 018, 028, and 029 (NAVAIR 19-40-521)</li> <li>• Aircraft Towing Tractor, A/S32A-32, Work Packages 003, 005, 006, 007, 010, 011, 012, 013, 014, 015, and 016 (NAVAIR 19-1-157)</li> <li>• Aircraft Towing Tractor, A/S32A-37, Work Packages 003, 005, 006, 010, 011, 012, 013, 014, 015, 016, and 024 (NAVAIR 19-40-519)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapters 2, 3, 4, 5, and 6 (NAVEDTRA 12385)</li> <li>• Basic Machines, Chapters 6, 8, 9, and 12 (NAVEDTRA 12199)</li> <li>• Detroit Diesel Engines, Series 53 Service Manual, Sections General Information, 1, 2, 3, 4, 5, 6, 12, 13, and 14 (NAVAIR 19-45D-32)</li> <li>• Fire Fighting Vehicle, A/S32P-25, Work Packages 003, 005, 006, 008, 020, 021, and 024 (NAVAIR 19-25-514)</li> <li>• Mobile Air Conditioning Unit, Model A/M32C-17, Sections 1, 2, 3, 4, and 5 (NAVAIR 16-60-87)</li> <li>• Mobile Electric Power Plant, Model NC-2A, Sections 1, 2, and 3 (NAVAIR 19-45-10)</li> <li>• Portable Floodlight Set, A/M42M-2, Work Packages 003, 005, 006, and 013 (NAVAIR 19-10-504)</li> <li>• Portable Hydraulic Power Supply, A/M27T-5, Work Packages 003, 005, 006, 009, 017, and 018 (NAVAIR 17-15BF-89)</li> <li>• Power Plant, Mobile Electric, Models NC-10C and NC-10B-1, Sections 1, 2, 4, and 5 (NAVAIR 19-45-20)</li> </ul>
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	<ul style="list-style-type: none"> <li>• Power Plant, Mobile Electric, Models NC-8A and NC-8A-1, Sections 1, 2, 4, and 5 (NAVAIR 19-45-9)</li> <li>• Support Equipment &amp; Aircraft Towing Tractor, A/S32A-30A, Sections 1, 2, 3, 4, and 5 (NAVAIR 19-40-520)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about diesel engine operation, maintenance, servicing, and troubleshooting. They will include questions on the mechanical systems, fuel system, air supply system, governors, exhaust system, cooling system, lubrication system, and the type/model of diesel engines. The questions may be of a general nature or specific to a type of equipment.</p>

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Mechanical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Gasoline Engines
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Types and models of gasoline engines used in support equipment</li> <li>• Operation of a gasoline engine, including mechanical operation, fuel system, carburetion, governors, air supply system, exhaust system, cooling system, and lubrication system</li> <li>• Component functions, locations, operation, and relationship with other components</li> <li>• Procedures for replacing and tensioning drive belts</li> <li>• Procedures for removal, replacement, repair, and servicing of gasoline engines and components of gasoline engines</li> <li>• Procedures for performing gasoline engine tune-ups, including valve lash adjustment, governor adjustment, point replacement and adjustment, carburetor adjustment, and ignition timing</li> <li>• Procedures for replacing fuel tanks, replacing fuel lines, and flushing fuel tanks for gasoline engines</li> <li>• Procedures for diagnosing gasoline engine malfunctions, including mechanical malfunctions, fuel system malfunctions, carburetion malfunctions, governor malfunction, air supply malfunctions, exhaust malfunctions, cooling system malfunctions, and lubrication system malfunctions</li> </ul>

<p><i>References</i> you should study to gain the knowledge you need to perform this skill:</p>	<ul style="list-style-type: none"> <li>• Aircraft Ground Support Equipment Towing Tractor, Type A/S32A-30, Work Packages 003, 005, 006, 008, 009, 010, 016, 018, 020, 021, and 033 (NAVAIR 19-40-45)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapters 2, 3, 4, 5, and 6 (NAVEDTRA 12385)</li> <li>• Basic Machines, Chapters 6, 8, 9, and 12 (NAVEDTRA 12199)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about gasoline engine operation, maintenance, servicing, and troubleshooting. They will include questions on the mechanical systems, fuel system, carburetion, air supply system, governors, exhaust system, cooling system, lubrication system, and the type/model of gasoline engines. The questions may be of a general nature or specific to a type of equipment.</p>

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Mechanical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Gas Turbine Engines and Gas Turbine Engine Enclosures
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Operation of a gas turbine engine and a gas turbine engine enclosure</li> <li>• Types and models of turbine engines and gas turbine engine enclosures</li> <li>• Component function, location, operation, and relationship with other components</li> <li>• Use of block, schematic and wiring diagrams</li> <li>• Procedures for removal, replacement, repair, and servicing of gas turbine engines and gas turbine engine components</li> <li>• Procedures for repairing gas turbine engine enclosures and gas turbine engine components</li> <li>• Procedures for diagnosing gas turbine engine and gas turbine engine enclosure malfunctions</li> <li>• Procedures for repair and building gas turbine engine bleed air hoses</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 12 (NAVEDTRA 12385)</li> <li>• GTE (GTCP-100) Tractor Mounted Enclosure, A/S47A-1, Work Packages 003, 004, 005, 006, and 007 (NAVAIR 19-105B-60)</li> <li>• Jet Aircraft Start Unit, A/M47A-4, Work Packages 003, 004, 005, 006, 007, and 008 (NAVAIR 19-105B-59)</li> <li>• Pneumatic and Shaft Power Gas Turbine Engine, Model GTCP100-82, Work Packages 002, 003, 004, 006, 007, 008, 009, 010, 011, 012, and 013 (A1-580AB-MMI-200)</li> </ul>

	<ul style="list-style-type: none"> <li>• Pneumatic Power Gas Turbine Engine, Models GTC85-72 and GTC85-76, Sections 1, 2, 3, 4, and 5 (NAVAIR 19-105B-12)</li> <li>• Support Equipment Basic Handling &amp; Safety Manual, Work Package 012 (NAVAIR 00-80T-96)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about gas turbine engines and gas turbine engine enclosure operation, maintenance, servicing, and troubleshooting. They will include types of turbine engines, types of enclosures, turbine engine operation, enclosure operation, engine replacement, engine repair, component repair, component replacement, and hose buildup/repair. The questions may be of a general nature or specific to a type of equipment.</p>

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Mechanical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Support Equipment Chassis, Frames, and Structures
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Types of metals used in support equipment</li> <li>• Tools used for repairing chassis, frames, and structures</li> <li>• Procedures for identifying chassis, frame, structure, and metal part defects</li> <li>• Procedures for straightening and repairing damaged chassis, frames, structures, and other metal parts</li> <li>• Procedures for identifying and using attaching hardware</li> <li>• Procedures for tapping bolt holes and performing thread repair</li> <li>• Requirements for aeronautical welding on support equipment</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 4 (NAVEDTRA 12017)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 1 and 2 (NAVEDTRA 12385)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapter 10 (OPNAVINST 4790.2)</li> <li>• Structural Hardware, Sections 2, 3, 4, 5, 6, 7, 8, 9, 11, and 12 (NAVAIR 01-1A-8)</li> <li>• Support Equipment Cleaning, Preservation, and Corrosion Control, Sections 2 and 4 (NAVAIR 17-1-125)</li> <li>• Use and Care of Hand Tools and Measuring Tools, Chapters 3, 5, 6, 7, 8, 9, 12, 17, 18, 19, 20, 21, 24, 26, 27, 28, 35, 37, 38, 52, and 53 (NAVEDTRA 12085)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about support equipment chassis, frames, and structures. They will include types of metals, tools used for repairs, attaching hardware, repair of metal components, and requirements for welding under the Aeronautical Welding Program. The questions will be of a general nature and not specific to a type of equipment.</p>
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## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Mechanical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Flight Deck Scrubbers
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Operation of flight deck scrubber mechanical, hydraulic, vacuum, and electrical systems</li> <li>• Use of block, schematic and wiring diagrams</li> <li>• Procedures for diagnosing and repairing flight deck scrubber mechanical, hydraulic, vacuum, and electrical systems</li> <li>• Operation of the Ships' 3-M Program</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapters 13 (NAVEDTRA 12385)</li> <li>• Flight Deck Scrubbers, Diesel Powered, Models 550DN and 550DN(C), Chapters 1, 2, 3, and 4 (SG340-AA-OMP-010)</li> <li>• Ships' Maintenance Material Management (3-M) Manual, Chapters 1, 2, 3, 4, 6, 7, 10, and 13 (OPNAVINST 4790.4)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about flight deck scrubber operation, maintenance, and troubleshooting, including the hydraulic system, the vacuum system, the electrical system, the mechanical components, and operation of the Ship's 3-M Program.



## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Mechanical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Hoisting and Lifting Devices
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Identification and operation of hoisting and lifting devices</li> <li>• Hoisting and lifting devices component functions and purposes</li> <li>• Inspection and repair procedures for hoisting and lifting devices</li> <li>• Load testing/certification procedures for hoisting and lifting devices</li> <li>• Procedures for diagnosing malfunctions on hoisting and lifting devices</li> <li>• Operation of the Ships' 3-M Program</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-35, Work Packages 003, 004, 005, 006, 007, 015, 018, 019, 020, 021, 022, 023, 030, 031, and 034 (NAVAIR 19-25G-19)</li> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-36, Work Packages 003, 004, 005, 006, 007, 017, 021, 023, 025, 026, 027, 028, 029, 030, and 033 (AG-310DO-OMM-000)</li> <li>• Aircraft Jacks, Various, Work Packages 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 022, 023, 024, 025, 026, and 027 (NAVAIR 19-70-521)</li> <li>• Aircraft Maintenance Crane, Wheel Mounted, 8 ½ Ton, A/M32M-14, Work Packages 003, 005, 006, 013, 014, 015, 018, 034, 035, 036, 037, 039, 040, 041, 042, 043, 044, 045, 046, 047, 048, 052, 054, 055, 061, 067, 068, 069, and 070 (NAVAIR 19-25G-16)</li> </ul>

	<ul style="list-style-type: none"> <li>• Aircraft Utility Crane, A/S32A-44, Work Packages 003, 004, 005, and 006 (NAVAIR 19-25G-20)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapters 13 (NAVEDTRA 12385)</li> <li>• Basic Machines, Chapters 1 and 7 (NAVEDTRA 12199)</li> <li>• Bomb Hoisting Unit, HLU-196B/E, Sections 1, 2, and 3 (NAVAIR 19-15BA-46)</li> <li>• Index and Application Tables for Aircraft Jacks, Sections 1, 2, 3, and 4 (NAVAIR 19-70-46)</li> <li>• Inspection and Proofload Testing of Lifting Slings for Aircraft and Related Components, Work Packages 002, 003, 004, and 005 (NAVAIR 17-1-114)</li> <li>• Manual Bomb Hoist, HLU-288/E, Work Package 001 (AG-420BO-S22-000)</li> <li>• Ships' Maintenance Material Management (3-M) Manual, Chapters 1, 2, 3, 4, 6, 7, 10, and 13 (OPNAVINST 4790.4)</li> <li>• Support Equipment Basic Handling and Safety Manual, Work Packages 006, 009, 013, and 014 (NAVAIR 00-80T-96)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about operation, maintenance, and troubleshooting of hoisting and lifting devices, including identification, characteristics, component functions, component operation, inspection procedures, repair procedures, load capabilities, load test procedures, and operation of the Ships' 3-M Program. The questions may be of a general nature or specific to a type of equipment.</p>

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Electrical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Service, Test, and Replace Batteries
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Electrical theory as it applies to lead acid batteries</li> <li>• Chemical action and production of electricity in a lead acid battery</li> <li>• Procedures for removing and replacing lead acid batteries</li> <li>• Procedures for servicing a lead acid battery</li> <li>• Procedures for testing a lead acid battery</li> <li>• Hazards and safety precautions associated with batteries and electrolyte</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 6 (NAVEDTRA 12385)</li> <li>• Naval Aircraft and Naval Aircraft Support Equipment Storage Batteries, Chapters 2, 3, and Safety Summary (NAVAIR 17-15BAD-1)</li> <li>• Navy Electricity and Electronics Training Series, Module 1, Chapter 2 (NAVEDTRA 172-01-00-98)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about electrical theory, construction, chemical actions, removal and replacement, servicing procedures, testing procedures, and safety hazards applied to lead acid batteries. The questions may be of a general nature or specific to a type of equipment.

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Electrical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Repair Wiring Harnesses and Electrical Connections
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Identification of wire numbers and color codes</li> <li>• Use of wiring diagrams</li> <li>• Procedures for soldering electrical connections</li> <li>• Procedures for repairing and replacing electrical wiring</li> <li>• Procedures for securing electrical harnesses</li> <li>• Procedures for repairing electrical power cables</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 6 (NAVEDTRA 12385)</li> <li>• Navy Electricity and Electronics Training Series, Module 4, Chapters 1, 2, and 3 (NAVEDTRA 172-04-00-98)</li> <li>• Repair and Assembly of External Power Cables and Attachable Plugs, Sections 2, 3, 4, and 5 (NAVAIR 17-1-116)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about wiring diagrams, wire identification, wire sizes, insulating materials, soldering procedures, wire repair procedures, securing wiring harnesses, and repair procedures for electrical power cables.

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Electrical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Electrical Systems on Diesel Engines
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Electrical theory as it applies to diesel engine electrical systems</li> <li>• Diesel engine electrical system component functions and characteristics</li> <li>• Operation of the electrical systems on a diesel engine, including starting, charging, governor, fuel supply/shutoff, instrumentation, and cold weather starting controls</li> <li>• Use of block, schematic and wiring diagrams</li> <li>• Procedures for repairing the diesel engine electrical system and replacing electrical components</li> <li>• Procedures for diagnosing malfunctions on diesel engine electrical systems</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-35, Work Packages 004, 006, 009, 010, and 011 (NAVAIR 19-25G-19)</li> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-36, Work Packages 004, 006, 009, 010, and 011 (AG-310DO-OMM-000)</li> <li>• Aircraft Mid-Range Tow Vehicle, Type A/S32A-42, Chapters 1 and 4 (NAVAIR 19-40-522)</li> <li>• Aircraft Towing Tractor, A/S32A-31A, Work Packages 003 and 006 (NAVAIR 19-40-521)</li> <li>• Aircraft Towing Tractor, A/S32A-32, Work Packages 003 and 006 (NAVAIR 19-1-157)</li> </ul>

	<ul style="list-style-type: none"> <li>• Aircraft Towing Tractor, A/S32A-37, Work Packages 003, 006, 011, and 017 (NAVAIR 19-40-519)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapters 6 (NAVEDTRA 12385)</li> <li>• Detroit Diesel Engine, Series 53 Service Manual, Section 7 (NAVAIR 19-45D-32)</li> <li>• Fire Fighting Vehicle, A/S32P-25, Work Packages 003, 006, 008, 018, 019, 022, and 023 (NAVAIR 19-25-514)</li> <li>• Mobile Air Conditioning Unit, Model A/M32C-17, Section 5 (NAVAIR 16-60-87)</li> <li>• Mobile Electric Power Plant, Model NC-2A, Sections 3 and 4 (NAVAIR 19-45-10)</li> <li>• Navy Electricity and Electronics Training Series, Module 1, Chapters 1 and 3 (NAVEDTRA 172-01-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 16, Chapters 1, 2, 3, and 4 (NAVEDTRA 172-16-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 19, Chapter 1 (NAVEDTRA 172-19-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 2, Chapters 1 and 2 (NAVEDTRA 172-02-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 20, Chapter 1 (NAVEDTRA 172-20-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 3, Chapters 1, 2, and 3 (NAVEDTRA 172-03-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 4, Chapter 3 (NAVEDTRA 172-04-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 5, Chapters 1, 2, and 3 (NAVEDTRA 172-05-00-98)</li> <li>• Portable Floodlight Set, A/M42M-2, Work Packages 003 and 006 (NAVAIR 19-10-504)</li> <li>• Portable Hydraulic Power Supply, A/M27T-5, Work Packages 003, 006, 019, and 020 (NAVAIR 17-15BF-89)</li> </ul>
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	<ul style="list-style-type: none"> <li>• Power Plant, Mobile Electric, Models NC-10C and NC-10B-1, Sections 1, 2, 3, and 5 (NAVAIR 19-45-20)</li> <li>• Power Plant, Mobile Electric, Models NC-8A and NC-8A-1, Sections 1, 2, and 5 (NAVAIR 19-45-9)</li> <li>• Support Equipment &amp; Aircraft Towing Tractor, A/S32A-30A, Sections 1, 2, and 5 (NAVAIR 19-40-520)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about theory, operation, components, repair procedures and troubleshooting of diesel engine electrical systems, including starting, charging, governor, fuels supply/shutoff, instrumentation, and cold weather starting controls. The questions may be of a general nature or specific to a type of equipment.</p>

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General AS <i>Skill Area</i>	<b>Electrical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Electrical and Ignition Systems on Gasoline Engines
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Electrical theory as it applies to gasoline engine electrical and ignition systems</li> <li>• Gasoline engine electrical and ignition system component functions and characteristics</li> <li>• Operation of the electrical systems on a gasoline engine, including starting, charging, ignition, and instrumentation</li> <li>• Use of block, schematic, and wiring diagrams</li> <li>• Procedures for repairing the gasoline engine electrical and ignition systems and replacing electrical and ignition system components</li> <li>• Procedures for diagnosing malfunctions on gasoline engine electrical and ignition systems</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aircraft Ground Support Equipment Towing Tractor, Type A/S32A-30, Work Packages 003, 006, 011, 021, and 022 (NAVAIR 19-40-45)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapters 3 and 6 (NAVEDTRA 12385)</li> <li>• Bomb Hoisting Unit, HLU-196B/E, Sections 1 and 3 (NAVAIR 19-15BA-46)</li> <li>• Navy Electricity and Electronics Training Series, Module 1, Chapters 1 and 3 (NAVEDTRA 172-01-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 16, Chapters 1, 2, 3, and 4 (NAVEDTRA 172-16-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 19, Chapter 1 (NAVEDTRA 172-19-00-98)</li> </ul>



	<ul style="list-style-type: none"> <li>• Navy Electricity and Electronics Training Series, Module 2, Chapters 1, 2, 3, and 4 (NAVEDTRA 172-02-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 20, Chapter 1 (NAVEDTRA 172-20-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 3, Chapters 1, 2, and 3 (NAVEDTRA 172-03-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 4, Chapter 3 (NAVEDTRA 172-04-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 5, Chapters 1, 2, and 3 (NAVEDTRA 172-05-00-98)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about theory, operation, components, repair procedures, and troubleshooting of gasoline engine electrical systems, including starting, charging, ignition, and instrumentation. The questions may be of a general nature or specific to a type of equipment.</p>

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Electrical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Mobile Electric Power Plants and Power Generating Systems
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Electrical theory as it applies to ac and dc generators, voltage regulation, fault protection systems, control circuits, frequency control, and electric motors</li> <li>• Electrical and electronic component operation, functions, and relationship with other components</li> <li>• Use of block, schematic and wiring diagrams</li> <li>• Procedures for operating mobile electric power plants and power generating systems</li> <li>• Procedures for adjusting the voltage, frequency, line drop compensation, and current limit settings on mobile electric power plants and power generating systems</li> <li>• Procedures for replacement of electrical and electronic components</li> <li>• Procedures for testing electrical and electronic components</li> <li>• Procedures for preventing damage to electronic components for Electrostatic Discharge (ESD)</li> <li>• Procedures for load banking mobile electric power plants and power generating systems</li> <li>• Procedures for diagnosing malfunctions on mobile electric power plants and power generating systems</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapters 6 and 7 (NAVEDTRA 12385)</li> </ul>

	<ul style="list-style-type: none"> <li>• Dummy Load, Electrical, DA-675/MSM, Work Packages 003, 004, 005, and 006 (NAVAIR 17-15BA-241)</li> <li>• Jet Aircraft Start Unit, A/M47A-4, Work Packages 003, 005, and 006 (NAVAIR 19-105B-59)</li> <li>• Mobile Electric Power Plant, Model NC-2A, Sections 1, 2, and 3 (NAVAIR 19-45-10)</li> <li>• Mobile Electric Power Plant, Type MMG-1A, Work Package 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 017, 018, 019, and 020 (NAVAIR 19-45-19)</li> <li>• Navy Electricity and Electronics Training Series, Module 1, Chapters 1 and 3 (NAVEDTRA 172-01-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 16, Chapters 1, 2, 3, and 4 (NAVEDTRA 172-16-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 19, Chapter 1 (NAVEDTRA 172-19-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 2, Chapters 1, 2, 3, 4, and 5 (NAVEDTRA 172-02-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 20, Chapter 1 (NAVEDTRA 172-20-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 21, Chapters 1 and 2 (NAVEDTRA 172-21-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 3, Chapters 1, 2, and 3 (NAVEDTRA 172-03-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 4, Chapters 1, 2, and 3 (NAVEDTRA 172-04-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 5, Chapters 2 and 3 (NAVEDTRA 172-05-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 6, Chapter 3 (NAVEDTRA 172-06-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 7, Chapters 1, 2, 3, and 4 (NAVEDTRA 172-07-00-98)</li> </ul>
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	<ul style="list-style-type: none"> <li>• Power Plant, Mobile Electric, Models NC-10C and NC-10B-1, Sections 1, 2, 3, 4, and 5 (NAVAIR 19-45-20)</li> <li>• Power Plant, Mobile Electric, Models NC-8A and NC-8A-1, Sections 1, 2, 3, 4, and 5 (NAVAIR 19-45-9)</li> <li>• Support Equipment Basic Handling &amp; Safety Manual, Work Package 010 (NAVAIR 00-80T-96)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about mobile electric power plant and power generating systems, including theory, operation, maintenance, and troubleshooting of generators, voltage regulators, control circuits, fault protection systems, frequency control systems, and electric motors. You can also expect questions about reading schematics and other electrical diagrams, load banking procedures, and operation of the load bank. The questions may be of a general nature or specific to a type of equipment.</p>

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Hydraulic and Pneumatic Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Hydraulic Systems
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Hydraulic theory as it applies to hydraulic components and hydraulic system operation</li> <li>• Operation of hydraulic systems and hydraulic equipment</li> <li>• Hydraulic system component functions, purposes, operation and relationship with other components.</li> <li>• Requirements of a proper working environment for hydraulic system maintenance</li> <li>• Procedures for servicing hydraulic systems, including identification of the proper fluid</li> <li>• Procedures for replacing hydraulic fluid drums on hydraulic servicing equipment</li> <li>• Procedures for identifying and repairing hydraulic system leaks</li> <li>• Procedures for repairing hydraulic servicing units and hydraulic power supplies</li> <li>• Procedures for cleaning, removing, repairing, replacing and adjusting hydraulic system components</li> <li>• Procedures for replacing hoses and tubing.</li> <li>• Procedures and tools for replacement of seals and packings</li> <li>• Procedures for identifying and applying forced removal dates on hoses</li> <li>• Procedures for bleeding and flushing hydraulic systems</li> <li>• Procedures for replacing filters on hydraulic systems</li> </ul>

	<ul style="list-style-type: none"> <li>• Procedures for performing functional and pressure checks on hydraulic systems and hydraulic equipment</li> <li>• Procedures for identifying and diagnosing malfunctions in hydraulic systems and hydraulic equipment</li> <li>• Procedures for hydraulic contamination prevention and control</li> <li>• Procedures for performing hydraulic contamination analysis</li> </ul>
<p><i>References you should study to gain the knowledge you need to perform this skill:</i></p>	<ul style="list-style-type: none"> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-35, Work Packages 003, 004, 006, 013, 014, and 015 (NAVAIR 19-25G-19)</li> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-36, Work Packages 003, 004, 005, 006, 015, 016, and 017 (AG-310DO-OMM-000)</li> <li>• Aircraft Jacks, Various, Work Packages 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 022, 023, 024, and 025 (NAVAIR 19-70-521)</li> <li>• Aircraft Maintenance Crane, Wheel-Mounted, 8 ½ Ton, A/S32M-14, Work Packages 003, 006, 014, 015, 018, 025, 035, 040, 041, 045, 046, 048, 055, 056, 057, 058, 059, 060, 061, 062, 063, 064, 065, and 068 (NAVAIR 19-25G-16)</li> <li>• Aircraft Towing Tractor, A/S32A-31A, Work Packages 003, 006, 016, and 021 (NAVAIR 19-40-521)</li> <li>• Aircraft Towing Tractor, A/S32A-32, Work Packages 003, 006, 008, 020, and 021 (NAVAIR 19-1-157)</li> <li>• Aircraft Towing Tractor, A/S32A-37, Work Packages 003, 006, and 018 (NAVAIR 19-40-519)</li> <li>• Aviation Hose and Tube Manual, Sections 2, 4, 6, 7, 9, and Safety Summary (NAVAIR 01-1A-20)</li> <li>• Aviation Hydraulics Manual, Sections 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, and Safety Summary (NAVAIR 01-1A-17)</li> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017)</li> </ul>

	<ul style="list-style-type: none"> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapters 2, 8, 13 (NAVEDTRA 12385)</li> <li>• Basic Machines, Chapters 9 and 10 (NAVEDTRA 12199)</li> <li>• Fire Fighting Vehicle, A/S32P-25, Work Packages 003, 006, 010, 015, 025, 026, and 028 (NAVAIR 19-25-514)</li> <li>• Flight Deck Scrubbers, Diesel Powered, Models 550DN and 550DN(C), Chapters 1, 2, 3, and 4 (SG340-AA-OMP-010)</li> <li>• Fluid Power, Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12 (NAVEDTRA 12964)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 6 (OPNAVINST 4790.2)</li> <li>• Portable Hydraulic Power Supply, A/M27T-5, Work Packages 003, 005, 006, 008, 010, 011, 012, 014, and 016 (NAVAIR 17-15BF-89)</li> <li>• Portable Hydraulic Power Supply, A/M27T-7, Work Packages 003, 005, 006, 007, 008, 009, 011, 014, 016, and 017 (NAVAIR 17-15BF-91)</li> <li>• Support Equipment Basic Handling &amp; Safety Manual, Work Packages 006, 008, 009, 013, 014, and 016 (NAVAIR 00-80T-96)</li> <li>• Test Stand, Aircraft Hydraulic Systems, A/M27T-6, Work Package 001 (NAVAIR 17-15BF-90)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of hydraulic system maintenance, repair, and troubleshooting, including theory, component purpose, component function, component replacement, operation, servicing, contamination prevention, contamination treatment and contamination analysis. The questions may be of a general nature or specific to a type of equipment.</p>

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Hydraulic and Pneumatic Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Nitrogen Servicing Equipment
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Characteristics of nitrogen</li> <li>• Safety procedures for nitrogen and compressed gases</li> <li>• Theory as applied to compressed gases and nitrogen servicing equipment</li> <li>• Procedures for servicing nitrogen servicing equipment</li> <li>• Operation of nitrogen servicing equipment</li> <li>• Component operation, purpose, and relationship with other components</li> <li>• Use of nitrogen servicing equipment schematics/diagrams</li> <li>• Procedures for removing and replacing nitrogen servicing equipment components</li> <li>• Procedures for cleaning, inspecting, and adjusting nitrogen servicing equipment components</li> <li>• Procedures for pressure checking nitrogen servicing equipment</li> <li>• Procedures for diagnosing nitrogen servicing equipment malfunctions</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 9 (NAVEDTRA 12385)</li> <li>• Nitrogen Cylinder, Portable, 3000 PSI, Sections 1, 2, 3, 4, and 5 (NAVAIR 19-35-17)</li> </ul>



	<ul style="list-style-type: none"> <li>• Nitrogen Servicing Handtruck, Type A/M34M-2, Work Packages 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, and 020 (NAVAIR 19-25B-17)</li> <li>• Nitrogen Servicing Unit, A/M26U-4, Work Packages 003, 004, 005, 006, 007, 008, 009, 010, and 011 (AG-750AO-OMM-000)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about nitrogen servicing equipment maintenance, servicing, troubleshooting, including characteristics of nitrogen, compressed gas theory, use of diagrams, component operation, component purpose, component replacement, cleaning procedures, inspection procedures, and pressure testing. These questions may be of a general nature or specific to a type of equipment.</p>

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Hydraulic and Pneumatic Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Oxygen Servicing Equipment
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Characteristics of liquid and gaseous oxygen used as Aviators' Breathing Oxygen (ABO)</li> <li>• Safety procedures for liquid and gaseous oxygen and compressed gases</li> <li>• Requirements of the ABO Surveillance Program</li> <li>• Theory as applied to compressed gases, liquefied gases, and oxygen servicing equipment</li> <li>• Procedures for servicing oxygen servicing equipment</li> <li>• Operation of oxygen servicing equipment</li> <li>• Component operation, purpose, and relationship with other components</li> <li>• Use of oxygen servicing equipment schematics/diagrams</li> <li>• Procedures for removing and replacing oxygen servicing equipment components</li> <li>• Procedures for cleaning, inspecting, and adjusting oxygen servicing equipment components</li> <li>• Procedures for pressure checking oxygen servicing equipment</li> <li>• Procedures for diagnosing oxygen servicing equipment malfunctions</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 10 (NAVEDTRA 12385)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 5 (OPNAVINST 4790.2)</li> </ul>

	<ul style="list-style-type: none"> <li>• Oxygen Servicing Unit, A/U26U-1, Work Packages 003, 004, 006, 007, 008, 009, 010, 011, and 012 (NAVAIR 19-25D-31)</li> <li>• Servicing Trailer, Liquid Oxygen, Low Loss, Closed Loop, Type TMU-70/M, Sections 1, 2, 3, and 4 (NAVAIR 19-25D-26)</li> <li>• Technical Manual of Oxygen/Nitrogen Cryogenic Systems, Chapters 2, 4, 5, and 7 (NAVAIR 06-30-501)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about liquid and gaseous oxygen servicing equipment maintenance, servicing, troubleshooting, and safety, including characteristics of liquid/gaseous oxygen, compressed gas theory, use of diagrams, component operation, component purpose, component replacement, cleaning procedures, inspection procedures, pressure testing, and the ABO Surveillance Program. These questions may be of a general nature or specific to a type of equipment.</p>

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>General Support Equipment Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform Support Equipment Tire and Wheel Maintenance
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements of the Support Equipment Tire and Wheel Program</li> <li>• Safety precautions and hazards when working with tires and wheels</li> <li>• Qualification requirements for performing tire/wheel maintenance</li> <li>• Operation of tire inflation equipment and tire cages</li> <li>• Types of wheels used on support equipment</li> <li>• Special tools required for tire/wheel maintenance</li> <li>• Procedures for removing, lubricating, storing, and replacing wheel bearings</li> <li>• Procedures for safely inflating/checking inflation of support equipment tires</li> <li>• Procedures for safely removing, disassembling, inspecting, assembling and replacing support equipment tires/wheels</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 2 (NAVEDTRA 12385)</li> <li>• Naval Aviation Maintenance Program, Volume 5, Chapter 7 (OPNAVINST 4790.2)</li> <li>• Support Equipment Tire and Wheel Assemblies, Work Packages 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, and 012 (NAVAIR 17-1-129)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about support equipment tire and wheel maintenance, including program requirements, qualification requirements, safety hazards/precautions, wheel types, special tools, inflation equipment, wheel bearings, inflation procedures, removal procedures, disassembly procedures, assembly procedures, and replacement procedures.</p>
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## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>General Support Equipment Maintenance</b>
<i>A skill</i> you are expected to perform from the General Skill Area above:	Perform Acceptance, Transfer, and Preoperational inspections
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirments for performing acceptance, transfer and preoperational inspections</li> <li>• Record requirements when receiving and transferring equipment</li> <li>• Use of acceptance/transfer inspection checklists</li> <li>• Use of preoperational maintenance requirements cards</li> <li>• Procedures for performing acceptance, transfer, and preoperational inspections</li> <li>• Procedures for completing tasks/servicing required by preoperational maintenance requirements cards and acceptance/transfer inspection checklists</li> <li>• Procedures for preparing equipment for shipping</li> <li>• Procedures for documenting preoperational inspections</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Hydraulics Manual, Section 7 (NAVAIR 01-1A-17)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapter 12 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 18 (OPNAVINST 4790.2)</li> <li>• Support Equipment Basic Handling &amp; Safety Manual, Work Package 003 (NAVAIR 00-80T-96)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about when, how, and why to perform acceptance, transfer, and preoperational inspections. The questions will be of a general nature.</p>
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## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>General Support Equipment Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Incorporate Technical Directives
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Definition and technical directive codes of a Support Equipment Change (SEC) and a Support Equipment Bulletin (SEB)</li> <li>• Types, amendments, and revisions of technical directives</li> <li>• Priority designators assigned to technical directives</li> <li>• Responsibilities for determining applicability, initiating a maintenance action, and procuring parts for technical directive incorporation</li> <li>• Identification of the proper maintenance level for technical directive incorporation</li> <li>• Record entry requirements for technical directives</li> <li>• Procedures for incorporating a technical directive</li> <li>• Procedures for verifying a technical directive</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 2 (NAVEDTRA 12017)</li> <li>• Naval Air Systems Command Technical Directives System, Sections 2, 3, and 5 (NAVAIR 00-25-300)</li> <li>• Naval Air Systems Command Technical Manual Program, Work Package 015 (NAVAIR 00-25-100)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapter 13 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 11 and Appendix A (OPNAVINST 4790.2)</li> </ul>



<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about technical directives, including definitions, responsibilities, types, amendments, revisions, codes, priority designators, maintenance levels, record entries, incorporation procedures, and verification procedures.</p>
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## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Manage a Dispersed Technical Publications Library
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Responsibilities of the dispersed technical publications librarian</li> <li>• Use of publication numbering system</li> <li>• Format of technical publications</li> <li>• Identification of publication changes/revisions</li> <li>• Publications utilized to locate publication numbers and publication stock numbers</li> <li>• Timelines for incorporation of changes/revisions</li> <li>• Procedures for page-checking publications</li> <li>• Procedures for incorporating changes in publications</li> <li>• Procedures for processing the Change Entry Certification Record (CECR)</li> <li>• Procedures for arrangement and numbering publication binders</li> <li>• Procedures for submitting a Technical Publications Deficiency Report (TPDR)</li> <li>• Procedures for ordering replacement publications</li> <li>• Procedures for adding civilian/contractor publications to the dispersed library</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 2 (NAVEDTRA 12017)</li> <li>• Naval Air Systems Command Technical Manual Program, Work Packages 003, 005, 007, 009, 010, 011, 012, 014, 015, 017, 019, 020, 022, and 023 (NAVAIR 00-25-100)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapter 14 (OPNAVINST 4790.2)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about operation of a dispersed technical publications library, including librarian responsibilities, publication changes/revisions, change/revision timelines, incorporating changes, processing CECRs, page-checking publications, publication numbering system, arrangement/numbering of publication binders, reference documents for publication ordering, publication ordering, submitting TPDRs, and civilian/contractor publications.</p>
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## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor the Tool Control Program
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Purpose of the Tool Control Program</li> <li>• Tool Control Program procedures and responsibilities</li> <li>• Design requirements for tool containers</li> <li>• Identification and use of tools</li> <li>• Tool container inventory and shortage list requirements</li> <li>• Tool marking requirements and procedures for tools that are too small to mark</li> <li>• Procedures and requirements for physical inventory inspections of tool containers</li> <li>• Tool control requirements for contractors</li> <li>• Procedures for reporting/investigating missing and broken tools</li> <li>• Procedures for reporting defective tools</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapter 15 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 13 (OPNAVINST 4790.2)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about the tool control program, including purpose, procedures, responsibilities, tool container design, use of tools, inventory lists, shortage lists, marking requirements, physical tool container inventories, contractors, broken/missing tool reporting/investigations, and defective tool reporting.</p>
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## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Corrosion Control</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform Corrosion Prevention and Treatment
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Definition of corrosion</li> <li>• Corrosion theory</li> <li>• Causes of corrosion</li> <li>• Types and identification of corrosion</li> <li>• Metals affected by corrosion</li> <li>• Equipment used for corrosion prevention and treatment</li> <li>• Materials used for corrosion prevention and treatment</li> <li>• Methods for preventing corrosion</li> <li>• Methods for removing corrosion</li> <li>• Methods for treating corrosion</li> <li>• Preferred coatings for support equipment</li> <li>• Application methods for support equipment coatings</li> <li>• Requirements and procedures for cleaning support equipment and inspecting for corrosion</li> <li>• Procedures for cleaning electric and electronic equipment</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 4 (NAVEDTRA 12017)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 1 (NAVEDTRA 12385)</li> <li>• Avionics Cleaning and Corrosion Prevention/Control, Sections 2, 3, 4, 5, 7, and Appendixes A and B (NAVAIR 16-1-540)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 12 and 16 (OPNAVINST 4790.2)</li> </ul>

	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume V, Chapters 14 and 18 (OPNAVINST 4790.2)</li> <li>• Support Equipment Basic Handling &amp; Safety Manual, Work Package 015 (NAVAIR 00-80T-96)</li> <li>• Support Equipment Cleaning, Preservation, and Corrosion Control, Sections 2, 3, 4, 5, 6, 7, 8, and Appendixes A and B (NAVAIR 17-1-125)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about corrosion prevention and treatment, including definition of corrosion, corrosion theory, causes of corrosion, corrosion identification, metals affected, equipment used, materials used, prevention methods, corrosion removal, corrosion treatment, coating selection/application, cleaning &amp; inspection requirements/procedures, and cleaning electric/electronic equipment. The questions may be of a general nature or specific to a type of equipment.</p>

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Corrosion Control</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Preserve and Depreserve Equipment
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Purpose of preservation</li> <li>• Requirements for preservation/depreservation</li> <li>• Requirements for preservation integrity checks</li> <li>• Levels of preservation and allowable timelines for each level</li> <li>• Use of preservation check-off lists</li> <li>• Use of preservation placards and tags</li> <li>• Materials used for equipment preservation</li> <li>• Procedures for preservation/depreservation</li> <li>• Special procedures for preservation of gas turbine engines</li> <li>• Maintenance required upon depreservation</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume I, Chapter 12 and 16 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 14 (OPNAVINST 4790.2)</li> <li>• Preservation of Naval Aircraft, Section 3 (NAVAIR 15-01-500)</li> <li>• Support Equipment Cleaning, Preservation, and Corrosion Control, Section 9 (NAVAIR 17-1-125)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about equipment preservation/depreservation, including purpose, requirements, levels, check-off lists, placards/tags, materials, procedures, special procedures for gas turbine engines, and maintenance required upon depreservation. The questions may be of a general nature or specific to a type of equipment.



## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>Management</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Direct and Perform Support Equipment Issues and Receipts
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements for the issue/receipt of support equipment</li> <li>• Responsibilities when performing support equipment issues/receipts</li> <li>• Documentation of support equipment issues/receipts, including Support Equipment Transaction Report and Support Equipment Preoperational Record</li> <li>• Licensing requirements for support equipment during issue/receipt</li> <li>• Identification of jack types and jacks used for a specific aircraft application</li> <li>• Requirements and procedures for performing joint preoperational inspections</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Index and Application Tables for Aircraft Jacks, Sections 1, 2, 3, and 4 (NAVAIR 19-70-46)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapter 12 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume III, Chapter 8 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapters 17 and 18 (OPNAVINST 4790.2)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about support equipment issue/receipt procedures, including requirements, documentation, procedures, and responsibilities.

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>General Administration</b>
<i>A skill</i> you are expected to perform from the General Skill Area above:	Document and Review Maintenance Actions
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements for documentation of maintenance actions</li> <li>• Codes used for documenting maintenance actions</li> <li>• Use of maintenance data system and NALCOMIS reports</li> <li>• Procedures for initiating and signing off documentation of maintenance actions</li> <li>• Procedures for performing workload verification</li> <li>• Procedures for documenting tool control compliance for the maintenance action</li> <li>• Procedures for documenting and ordering repair parts</li> <li>• Procedures for reviewing status of parts on order</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 1 (NAVEDTRA 12017)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapter 12 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume III, Chapters 2, 3, 5, 6, 7, 8, 9, and Appendixes E, G, H, I, J, K, L, M, N, O, P, Q, R, and S (OPNAVINST 4790.2)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about maintenance action documentation from initiation to completion, including procedures, codes, parts ordering, parts status review, workload verification, reports, and tool control documentation.

## Advancement Handbook for AS3

General AS <i>Skill Area</i>	<b>General Administration</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Use, Store, and Dispose of Hazardous Materials
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Use of the Hazardous Materials User's Guide (HMUG)</li> <li>• Use of Material Safety Data Sheets (MSDS)</li> <li>• Safety precautions for working with hazardous materials</li> <li>• Personal protective equipment (PPE) used when working with hazardous materials</li> <li>• Use of hazardous material inventories</li> <li>• Storage procedures for hazardous materials</li> <li>• Identification of hazardous material containers</li> <li>• Cleaning and inspection procedures for hazardous material containers</li> <li>• Hazardous material disposal procedures</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Environmental and Natural Resources Program Manual, Chapters 3, 6, 10, and 12 (OPNAVINST 5090.1)</li> <li>• Hazardous Materials User's Guide, Introduction, Groups 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, and 19</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 20 (OPNAVINST 4790.2)</li> <li>• Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume I, Chapter B3 (OPNAVINST 5100.19)</li> <li>• Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume II, Chapter C23 (OPNAVINST 5100.19)</li> <li>• Navy Occupational Safety and Health Program Manual, Chapter 7 (OPNAVINST 5100.23)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about the use, storage, and disposal of hazardous material, including MSDS, safety precautions, PPE, inventories, and storage containers.</p>
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## Part 2

### Advancement Handbook for AS2

## Advancement Handbook for AS2

General AS <i>Skill Area</i>	<b>Mechanical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Troubleshoot Mobile Fire Fighting Units
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Operation of fire-fighting equipment</li> <li>• Fire-fighting equipment component functions, operation, and relationship with other components</li> <li>• Operation of the nitrogen, hydraulic, AFFF, and halon systems</li> <li>• Characteristics and precautions when working with halon and AFFF</li> <li>• Procedures for diagnosing malfunctions on fire-fighting equipment</li> <li>• Procedures for diagnosing and correcting halon system leaks</li> <li>• Procedures for servicing, recovering and preventing loss of halon</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 13 (NAVEDTRA 12385)</li> <li>• Fire Fighting Vehicle, A/S32P-25, Work Packages 003, 005, 006, 007, 009, 010, 011, 017, 025, 026, 027, and 028 (NAVAIR 19-25-514)</li> <li>• Support Equipment Basic Handling &amp; Safety Manual, Work Package 016 (NAVAIR 00-80T-96)</li> <li>• TAU-2A Twinned Agent Fire Fighting System, Sections 1, 2, 3, 4, 5, and 6 (NAVAIR 19-45-18)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about mobile fire fighting equipment operation, maintenance, and troubleshooting, including hydraulic system, nitrogen system, AFFF system, halon system, and halon recovery/servicing. The questions may be of a general nature or specific to a type of equipment.</p>
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## Advancement Handbook for AS2

General AS <i>Skill Area</i>	<b>Electrical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Repair Engine Overspeed Systems
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Operation of engine overspeed systems and switches</li> <li>• Procedures for adjusting engine overspeed switches</li> <li>• Procedures for removing and replacing engine overspeed switches</li> <li>• Procedures for diagnosing malfunctions of engine overspeed systems</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-35, Work Packages 005 and 009 (NAVAIR 19-25G-19)</li> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-36, Work Packages 005 and 009 (AG-310DO-OMM-000)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 6 (NAVEDTRA 12385)</li> <li>• Detroit Diesel Engines, Series 53 Service Manual, Section 7 (NAVAIR 19-45D-32)</li> <li>• Mobile Air Conditioning Unit, Model A/M32C-17, Sections 1 and 5 (NAVAIR 16-60-87)</li> <li>• Mobile Electric Power Plant, Model NC-2A, Section 3 (NAVAIR 19-45-10)</li> <li>• Power Plant, Mobile Electric, Models NC-10C and NC-10B-1, Sections 1, 2, and 5 (NAVAIR 19-45-20)</li> <li>• Power Plant, Mobile Electric, Models NC-8A and NC-8A-1, Sections 1, 2, and 5 (NAVAIR 19-45-9)</li> </ul>



<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about the operation and maintenance of engine overspeed systems, including adjustment, removal, replacement, and troubleshooting. The questions may be of a general nature or specific to a type of equipment.</p>
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## Advancement Handbook for AS2

General AS <i>Skill Area</i>	<b>Electrical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Troubleshoot and Repair DC Electric Motors
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Operation of dc electric motors</li> <li>• Component purpose, operation, and relationship with other components</li> <li>• Procedures for diagnosing dc electric motor malfunctions</li> <li>• Procedures for removal, replacement, and repair of dc electric motors</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-35, Work Packages 003, 004, 006, 018, and 019 (NAVAIR 19-25G-19)</li> <li>• Aircraft Crash Handling and Salvage Crane, A/S32A-36, Work Packages 003, 004, 006, 012, and 025 (AG-310DO-OMM-000)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 6 and 7 (NAVEDTRA 12385)</li> <li>• Mobile Electric Power Plant, Model NC-2A, Sections 1 and 3 (NAVAIR 19-45-10)</li> <li>• Navy Electricity and Electronics Training Series, Module 1, Chapters 1 and 3 (NAVEDTRA 172-01-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 5, Chapter 2 (NAVEDTRA 172-05-00-98)</li> <li>• Power Plant, Mobile Electric, Models NC-8A and NC-8A-1, Sections 1, 2, and 5 (NAVAIR 19-45-9)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about dc electric motor maintenance and troubleshooting, including component function, component operation, removal, repair, and replacement. The questions may be of a general nature or specific to a type of equipment.</p>
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## Advancement Handbook for AS2

General AS <i>Skill Area</i>	<b>Electrical Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Troubleshoot and Repair Mobile Electric Power Plants and Power Generating Systems
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Electrical theory as it applies to ac and dc generators, voltage regulation, fault protection systems, control circuits, frequency control, and electric motors</li> <li>• Electrical and electronic component operation, functions, and relationship with other components</li> <li>• Use of block, schematic, and wiring diagrams</li> <li>• Procedures for operating mobile electric power plants and power generating systems</li> <li>• Procedures for adjusting the voltage, frequency, line drop compensation, and current limit settings on mobile electric power plants and power generating systems</li> <li>• Procedures for replacement of electrical and electronic components</li> <li>• Procedures for testing electrical and electronic components</li> <li>• Procedures for preventing damage to electronic components for Electrostatic Discharge (ESD)</li> <li>• Procedures for load banking mobile electric power plants and power generating systems</li> <li>• Procedures for diagnosing malfunctions on mobile electric power plants and power generating systems</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapters 6 and 7 (NAVEDTRA 12385)</li> </ul>

	<ul style="list-style-type: none"> <li>• Dummy Load, Electrical, DA-675/MSM, Work Packages 003, 004, 005, and 006 (NAVAIR 17-15BA-241)</li> <li>• Jet Aircraft Start Unit, A/M47A-4, Work Packages 003, 005, and 006 (NAVAIR 19-105B-59)</li> <li>• Mobile Electric Power Plant, Model NC-2A, Sections 1, 2, and 3 (NAVAIR 19-45-10)</li> <li>• Mobile Electric Power Plant, Type MMG-1A, Work Package 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 017, 018, 019, and 020 (NAVAIR 19-45-19)</li> <li>• Navy Electricity and Electronics Training Series, Module 1, Chapters 1 and 3 (NAVEDTRA 172-01-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 16, Chapters 1, 2, 3, and 4 (NAVEDTRA 172-16-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 19, Chapter 1 (NAVEDTRA 172-19-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 2, Chapters 1, 2, 3, 4, and 5 (NAVEDTRA 172-02-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 20, Chapter 1 (NAVEDTRA 172-20-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 21, Chapters 1 and 2 (NAVEDTRA 172-21-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 3, Chapters 1, 2, and 3 (NAVEDTRA 172-03-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 4, Chapters 1, 2, and 3 (NAVEDTRA 172-04-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 5, Chapters 2 and 3 (NAVEDTRA 172-05-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 6, Chapter 3 (NAVEDTRA 172-06-00-98)</li> <li>• Navy Electricity and Electronics Training Series, Module 7, Chapters 1, 2, 3, and 4 (NAVEDTRA 172-07-00-98)</li> </ul>
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	<ul style="list-style-type: none"> <li>• Power Plant, Mobile Electric, Models NC-10C and NC-10B-1, Sections 1, 2, 3, 4, and 5 (NAVAIR 19-45-20)</li> <li>• Power Plant, Mobile Electric, Models NC-8A and NC-8A-1, Sections 1, 2, 3, 4, and 5 (NAVAIR 19-45-9)</li> <li>• Support Equipment Basic Handling &amp; Safety Manual, Work Package 010 (NAVAIR 00-80T-96)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about mobile electric power plant and power generating systems, including theory, operation, maintenance, and troubleshooting of generators, voltage regulators, control circuits, fault protection systems, frequency control systems, and electric motors. You can also expect questions about reading schematics and other electrical diagrams, load banking procedures, and operation of the load bank. The questions may be of a general nature or specific to a type of equipment.</p>

## Advancement Handbook for AS2

General AS <i>Skill Area</i>	<b>Hydraulic and Pneumatic Maintenance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Mobile Air-Conditioners
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Types of heat transfer</li> <li>• Fundamentals of air-conditioning</li> <li>• Operation of air-conditioning systems and mobile air-conditioners</li> <li>• Component identification, function, operation, and relationship with other system components</li> <li>• Special tools and equipment required for air-conditioner maintenance</li> <li>• Certification requirements for personnel performing refrigerant servicing/recovery</li> <li>• Characteristics and hazards of refrigerants</li> <li>• State of refrigerant at all stages of air-conditioning operation</li> <li>• Procedures for adjusting, testing, removing, repairing, and replacing air-conditioner components</li> <li>• Procedures for detecting and repairing refrigerant leaks</li> <li>• Procedures for recovering refrigerant</li> <li>• Procedures for evacuating an air-conditioning system</li> <li>• Procedures for charging an air-conditioning system</li> <li>• Procedures for diagnosing air-conditioner malfunctions</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Air Conditioner, Aircraft Ground Cooling, A/M32C-21, Work Packages 003, 005, 006, 007, 008, 009, 010, 011, and 012 (AG-180AO-MMM-000)</li> </ul>

	<ul style="list-style-type: none"> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 11 (NAVEDTRA 12385)</li> <li>• Environmental and Natural Resources Program Manual, Chapter 6 (OPNAVINST 5090.1)</li> <li>• Mobile Air Conditioning Unit, Model A/M32C-17, Section 1, 3, 4, and 5 (NAVAIR 16-60-87)</li> <li>• Refrigerant Recovery-Recycle System, ST-100/A-USN &amp; ST-1000, Work Package 001 (NAVAIR 19-60-91)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about mobile air-conditioner maintenance and troubleshooting, including heat transfer, fundamentals of air-conditioning, refrigerant cycle, operation, components, special tools, certification requirements, refrigerant characteristics, refrigerant hazards, refrigerant servicing, refrigerant recovery, evacuation, and leak detection/repair. The questions may be of a general nature or specific to a type of equipment.</p>



## Advancement Handbook for AS2

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Manage the Support Equipment Misuse/Abuse Program
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements for submitting Support Equipment Misuse/Abuse reports</li> <li>• Tracking requirements for Support Equipment Misuse/Abuse reports</li> <li>• Procedures for submitting/routing a Support Equipment Misuse/Abuse report</li> <li>• Procedures for investigating a Support Equipment Misuse/Abuse report</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapters 5 and 6 (NAVEDTRA 12017)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 14 and 15 and Appendix B (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 17 and Appendix B (OPNAVINST 4790.2)</li> <li>• Support Equipment Basic Handling &amp; Safety Manual, Work Package 003 (NAVAIR 00-80T-96)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the Support Equipment Misuse/Abuse Program, including reporting, tracking, routing, and investigating Support Equipment Misuse/Abuse reports.

## Advancement Handbook for AS2

General AS <i>Skill Area</i>	<b>Management</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Prepare Work Requests and Work Orders
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements for submitting a work request to other work centers</li> <li>• Requirements for submitting a work request for depot level repairs</li> <li>• Documentation required for other work center and depot level work requests</li> <li>• Codes used on the maintenance action form for work request documents</li> <li>• Procedures for initiating a work request to another work center</li> <li>• Procedures for submitting a work request for depot level repair</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume I, Chapter 10 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume III, Chapters 5, 6, 9, and Appendixes E, H, I, and O (OPNAVINST 4790.2)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the requirements, documentation, and procedures for submitting work requests to other work centers or depot level activities.

## Advancement Handbook for AS2

General AS <i>Skill Area</i>	<b>Management</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Prepare Support Equipment Transaction Reports
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements for preparing a Support Equipment Transaction Report</li> <li>• Information entered on the Support Equipment Transaction Report</li> <li>• Procedures for submitting Support Equipment Transaction Reports on equipment being received or transferred</li> <li>• Procedures for using the Support Equipment Transaction Report to document local issue/receipt of support equipment</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Air Systems Command Aircraft Maintenance Material Readiness List Program, Enclosures 7 and 12 (NAVAIRINST 13650.1)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 10, 12, and 16 and Appendix B (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume III, Chapter 8 and Appendix B (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 18 and Appendix B (OPNAVINST 4790.2)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the information contained on the Support Equipment Transaction Report, and requirements and procedures for using/submitting these reports.

## Advancement Handbook for AS2

General AS <i>Skill Area</i>	<b>Management</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Review Technical Manuals
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Use of publication numbering system</li> <li>• Format of technical publications</li> <li>• Identification of publication changes/revisions</li> <li>• Publications used to locate publication numbers and publication stock numbers</li> <li>• Procedures for page-checking publications</li> <li>• Procedures for incorporating changes in publications</li> <li>• Procedures for arrangement and numbering publication binders</li> <li>• Procedures for submitting a Technical Publications Deficiency Report (TPDR)</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 2 (NAVEDTRA 12017)</li> <li>• Naval Air Systems Command Technical Manual Program, Work Packages 003, 005, 007, 009, 010, 011, 012, 014, 015, 017, 019, 020, 022, and 023 (NAVAIR 00-25-100)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapter 14 (OPNAVINST 4790.2)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about reviewing technical publications, including publication numbers, publication formats, identification of changes/revisions, page-checking, change incorporation, binders, and TPDRs.

## Advancement Handbook for AS2

General AS <i>Skill Area</i>	<b>Management</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Conduct Support Equipment Operator Training
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements and responsibilities of the Support Equipment Operator Training and Licensing Program</li> <li>• Support equipment that requires a license</li> <li>• Source of training courses for support equipment licensing</li> <li>• Qualification requirements for a support equipment licensing instructor</li> <li>• Information required in all training courses</li> <li>• Driver's license requirements and extension policies for personnel licensed to operate self-propelled support equipment</li> <li>• Procedures for completing the SE License Certification</li> <li>• Procedures for completing the USN Aviation Support Equipment Operator's License</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 17 and Appendix B (OPNAVINST 4790.2)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about requirements, responsibilities, and procedures for implementing the Support Equipment Operator Training and Licensing Program, including equipment requiring a license, source of courses, instructor requirements, course construction, driver's license requirements, completion of the SE License Certification and completion of the USN Aviation Support Equipment Operator's License.</p>
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## Advancement Handbook for AS2

General AS <i>Skill Area</i>	<b>General Administration</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Review Status of Ordered Parts
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Purpose of Awaiting Parts (AWP) Validation</li> <li>• Requirements for performing AWP Validation</li> <li>• Source of AWP lists/reports</li> <li>• Status codes used by the supply system</li> <li>• Procedures for performing AWP validation</li> <li>• Procedures for determining the status of ordered parts</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume I, Chapter 12 (OPNAVINST 4790.2)</li> <li>• Naval Supply Procedures, Volume II, Supply Appendices, Appendix 2 (NAVSUP P-485)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the procedures for reviewing the status of ordered parts, including purpose, requirements, source of reports, and status codes.

## Advancement Handbook for AS2

General AS <i>Skill Area</i>	<b>General Administration</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform Individual Material Readiness List (IMRL) Inventories
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements for performing IMRL inventories</li> <li>• Use and updating of the Local Asset Management System (LAMS)</li> <li>• Procedures for performing IMRL inventories</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Air Systems Command Aircraft Maintenance Material Readiness List Program, Body and Enclosure 12 (NAVAIRINST 13650.1)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 10 and 15 (OPNAVINST 4790.2)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the requirements and procedures for performing IMRL inventories and updating LAMS reports.



## Advancement Handbook for AS2

General AS <i>Skill Area</i>	<b>General Administration</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Inspect Hazardous Material Storage Areas
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements for hazardous material storage areas</li> <li>• Storage procedures for hazardous materials</li> <li>• Use of the Hazardous Materials User's Guide (HMUG)</li> <li>• Use of Material Safety Data Sheets (MSDS)</li> <li>• Safety precautions for working around hazardous materials</li> <li>• Personal protective Equipment (PPE) used when working around hazardous materials</li> <li>• Identification of hazardous material containers</li> <li>• Hazardous material disposal procedures</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Environmental and Natural Resources Program Manual, Chapters 3 and 12 (OPNAVINST 5090.1)</li> <li>• Hazardous Materials User's Guide, Introduction, Groups 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, and 19</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 20 (OPNAVINST 4790.2)</li> <li>• Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume I, Chapter B3 (OPNAVINST 5100.19)</li> <li>• Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume II, Chapter C23 (OPNAVINST 5100.19)</li> <li>• Navy Occupational Safety and Health Program Manual, Chapter 7 (OPNAVINST 5100.23)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about inspection of hazardous material storage areas, including requirements, storage procedures, use of the HMUG, use of the MSDS, safety precautions, PPE, container identification, and disposal procedures.</p>
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## Part 3

### Advancement Handbook for AS1

## Advancement Handbook for AS1

General AS Skill Area	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor the Corrosion Prevention and Control Program
Knowledge you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements of the Corrosion Prevention and Control Program</li> <li>• Definition of corrosion</li> <li>• Corrosion theory</li> <li>• Causes of corrosion</li> <li>• Types and identification of corrosion</li> <li>• Metals affected by corrosion</li> <li>• Equipment used for corrosion prevention and treatment</li> <li>• Materials used for corrosion prevention and treatment</li> <li>• Methods for preventing corrosion</li> <li>• Methods for removing corrosion</li> <li>• Methods for treating corrosion</li> <li>• Preferred coatings for support equipment</li> <li>• Application methods for surface coatings</li> <li>• Requirements and procedures for cleaning and inspecting for corrosion</li> <li>• Procedures for cleaning electric and electronic equipment</li> <li>• Procedures for documenting corrosion prevention and treatment</li> </ul>
References you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aircraft Weapons Systems Cleaning and Corrosion Control, Chapters 1, 2, 3, 4, 5, 6, 7, 8, and 9, Appendixes A, B, C, and D, and Safety Summary (NAVAIR 01-1A-509)</li> <li>• Aviation Maintenance Ratings, Chapter 4 (NAVEDTRA 12017)</li> </ul>

	<ul style="list-style-type: none"> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 1 (NAVEDTRA 12385)</li> <li>• Avionics Cleaning and Corrosion Prevention/Control, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10, Appendixes A, B, and C, and Safety Summary (NAVAIR 16-1-540)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 12 and 16 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume III, Chapters 3 and 9 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapters 14 and 18 (OPNAVINST 4790.2)</li> <li>• Support Equipment Basic Handling and Safety Manual, Work Package 015 (NAVAIR 00-80T-96)</li> <li>• Support Equipment Cleaning, Preservation, and Corrosion Control, Sections 1, 2, 3, 4, 5, 6, 7, 8, and Appendixes A and B (NAVAIR 17-1-125)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about monitoring the Corrosion Prevention and Control Program in an AIMD. These questions will include all aspects of the program, including, but not limited to, program requirements, corrosion identification, corrosion prevention, corrosion removal, corrosion treatment, corrosion reports, and documentation of corrosion prevention/treatment.</p>

## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor the Support Equipment Operator Training and Licensing Program
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements and responsibilities of the Support Equipment Operator Training and Licensing Program</li> <li>• Support equipment that requires a license</li> <li>• Source of training courses for support equipment licensing</li> <li>• Qualification requirements for a support equipment licensing instructor</li> <li>• Information required in all training courses</li> <li>• Driver's license requirements and extension policies for personnel licensed to operate self-propelled support equipment</li> <li>• Procedures for completing the SE License Certification</li> <li>• Procedures for completing the USN Aviation Support Equipment Operator's License</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 17 and Appendix B (OPNAVINST 4790.2)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about monitoring the Support Equipment Operator Training and Licensing Program. These questions will include all aspects of the program, including, but not limited to, program requirements, equipment license requirements, training courses, instructor qualifications, and licensing form completion.</p>
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## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor the Hydraulic Contamination Control Program
Knowledge you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements of the Hydraulic Contamination Control Program</li> <li>• Hydraulic fluids used in support equipment</li> <li>• Types of hydraulic contamination</li> <li>• Acceptable limits of hydraulic contamination</li> <li>• Hydraulic contamination prevention methods</li> <li>• Methods of hydraulic system decontamination</li> <li>• Forced removal requirements for synthetic hoses</li> <li>• Hydraulic contamination control certification requirements and procedures</li> <li>• Hydraulic contamination sampling and testing procedures</li> <li>• Procedures for performing trend analysis of hydraulic contamination samples</li> <li>• Procedures for documenting hydraulic contamination in support equipment records</li> </ul>
References you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Hose and Tube Manual, Sections 5, 6, and Safety Summary (NAVAIR 01-1A-20)</li> <li>• Aviation Hydraulics Manual, Sections 1, 2, 3, 4, 5, 7, 8, 9, 10, and 11 (NAVAIR 01-1A-17)</li> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 8 (NAVEDTRA 12385)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapters 6 and 18 (OPNAVINST 4790.2)</li> </ul>



<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about monitoring the Hydraulic Contamination Control Program. These questions will include all aspects of the program, including, but not limited to, requirements, fluids, contamination types, contamination limits, contamination prevention, decontamination, hose forced removal, contamination control certification, sampling/testing, trend analysis, and documenting contaminated equipment.</p>
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## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor Support Equipment Tire and Wheel Maintenance Safety Program
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements of the Support Equipment Tire and Wheel Program</li> <li>• Safety precautions and hazards when working with tires and wheels</li> <li>• Qualification requirements for performing tire/wheel maintenance</li> <li>• Proper operation of tire inflation equipment and tire cages</li> <li>• Types of wheels used on support equipment</li> <li>• Special tools required for tire/wheel maintenance</li> <li>• Procedures for removing, lubricating, storing, and replacing wheel bearings</li> <li>• Procedures for safely inflating/checking inflation of support equipment tires</li> <li>• Procedures for safely removing, disassembling, inspecting, assembling and replacing support equipment tires/wheels</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 7 (OPNAVINST 4790.2)</li> <li>• Support Equipment Tire and Wheel Assemblies, Work Packages 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, and 012 (NAVAIR 17-1-129)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about monitoring the Support Equipment Tire and Wheel Maintenance Safety Program. These questions will include all aspects of the program, including, but not limited to, program requirements, safety precautions, qualification requirements, tire inflation, wheel types, special tools, wheel bearing maintenance, and tire/wheel buildup.</p>
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## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor the Collateral Duty Inspector (CDI) Program
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements of the Collateral Duty Inspector Program</li> <li>• Qualification requirements of a CDI</li> <li>• Designation procedures for a CDI</li> <li>• Responsibilities of a CDI</li> <li>• Inspections performed by a CDI</li> <li>• CDI stamp requirements</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 12, 14, and 15 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapters 13, 14, and 18 (OPNAVINST 4790.2)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the Collateral Duty Inspector Program. These questions will include all aspects of the program, including, but not limited to, program requirements, qualification requirements, designation procedures, CDI responsibilities, inspections, and CDI stamp requirements.

## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor the Aviation Gas Free Engineering Program
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements of the Aviation Gas Free Engineering Program</li> <li>• Purpose of the Aviation Gas Free Engineering Program</li> <li>• Responsibilities in the Aviation Gas Free Engineering Program</li> <li>• Training and position requirements for gas free engineers</li> <li>• Gas free test procedures</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aircraft Fuel Cells and Tanks, Section 2 (NAVAIR 01-1A-35)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 10, 14, and 21 (OPNAVINST 4790.2)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the Aviation Gas Free Engineering Program. These questions will include all aspects of the program, including, but not limited to, program requirements, purpose, responsibilities, training requirements, and test procedures.

## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor the Foreign Object Damage (FOD) Prevention Program
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements of the Foreign Object Damage (FOD) Prevention Program</li> <li>• Responsibilities for FOD prevention</li> <li>• Causes of FOD</li> <li>• Procedures for preventing FOD</li> <li>• Reporting procedures for foreign object damage to gas turbine engines</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 14, 17, and 21 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapters 12 and 13 (OPNAVINST 4790.2)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the Foreign Object Damage Prevention Program. These questions will include all aspects of the program, including, but not limited to, program requirements, responsibilities, FOD causes, FOD prevention, and reporting procedures.

## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor the Electrostatic Discharge (ESD) Program
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements of the Electrostatic Discharge Program</li> <li>• Causes of electrostatic discharge</li> <li>• Methods for preventing damage to electrical components due to ESD</li> <li>• ESD protective packaging materials</li> <li>• Special tools/equipment used to prevent ESD damage during electrical component repair</li> <li>• ESD training requirements</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 22 (OPNAVINST 4790.2)</li> <li>• Navy Electricity and Electronics Training Series, Module 14, Chapter 3 (NAVEDTRA 172-14-00-98)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the Electrostatic Discharge Program. These questions will include all aspects of the program, including, but not limited to, program requirements, causes of ESD, ESD prevention, ESD safe packaging materials, ESD tools/equipment, and ESD training requirements.

## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor the Miniature/Microminiature (2M) Program
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements of the Miniature/Microminiature Program</li> <li>• Certification/recertification requirements for 2M repair technicians</li> <li>• Qualification requirements for personnel inspecting 2M maintenance</li> <li>• Special tools/equipment required for 2M maintenance</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 23 (OPNAVINST 4790.2)</li> <li>• Navy Electricity and Electronics Training Series, Module 14, Chapters 2 and 3 (NAVEDTRA 172-14-00-98)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the Miniature/Microminiature (2M) Program. These questions will include all aspects of the program, including, but not limited to, program requirements, 2M certification, 2M inspector qualification requirements, and special tools/equipment.



## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor the Aviators' Breathing Oxygen (ABO) Surveillance Program
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements of the Aviators' Breathing Oxygen Surveillance Program</li> <li>• Cleanliness requirements for ABO equipment and components</li> <li>• Characteristics of gaseous and liquid oxygen</li> <li>• Safety hazards associated with ABO</li> <li>• Type of contamination associated with ABO</li> <li>• Procedures for preventing contamination of ABO equipment</li> <li>• Procedures for detecting contamination in ABO</li> <li>• Requirements for purging ABO equipment</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017)</li> <li>• Aviation Support Equipment Technician 3 &amp; 2, Chapter 10 (NAVEDTRA 12385)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 5 (OPNAVINST 4790.2)</li> <li>• Support Equipment Basic Handling &amp; Safety Manual, Work Package 007 (NAVAIR 00-80T-96)</li> <li>• Technical Manual of Oxygen/Nitrogen Cryogenic Systems, Sections 4, 5, and 7 (NAVAIR 06-30-501)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about the Aviators' Breathing Oxygen Surveillance Program. These questions will include all aspects of the program, including, but not limited to, program requirements, cleanliness requirements, ABO characteristics, ABO safety, ABO contamination, and purging.</p>
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## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor Pollution Control Requirements
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements for hazardous material storage areas</li> <li>• Storage procedures for hazardous materials</li> <li>• Methods of disposal for hazardous materials</li> <li>• Effects of hazardous materials on the environment</li> <li>• Procedures for cleaning up hazardous material spills</li> <li>• Use of the Hazardous Materials User's Guide (HMUG)</li> <li>• Use of Material Safety Data Sheets (MSDS)</li> <li>• Identification of hazardous material containers</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Environmental and Natural Resources Program Manual, Chapters 3, 5, 6, 7, 9, 10, 12, 16, 17, 18, and 19 (OPNAVINST 5090.1)</li> <li>• Hazardous Materials User's Guide, Introduction and Groups 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, and 19</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 20 (OPNAVINST 4790.2)</li> <li>• Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume I, Chapter B3 (OPNAVINST 5100.19)</li> <li>• Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume II, Chapter C23 (OPNAVINST 5100.19)</li> <li>• Navy Occupational Safety and Health Program Manual, Chapter 7 (OPNAVINST 5100.23)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about monitoring the compliance with pollution control regulations and hazardous material storage. These questions will include all aspects of these requirements, including, but not limited to, hazardous material storage, hazardous material disposal, environmental effects, spill cleanup, container identification, HMUG, and MSDS.</p>
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## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Manage the Naval Aviation Maintenance Discrepancy Reporting Program (NAMDRP)
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements of the Naval Aviation Maintenance Discrepancy Reporting Program</li> <li>• When a NAMDRP report is required</li> <li>• Responsibilities for submitting NAMDRP reports</li> <li>• Procedures for submitting NAMDRP reports</li> <li>• Types of NAMDRP reports</li> <li>• Forms used for NAMDRP reports</li> <li>• Methods for submitting NAMDRP reports</li> <li>• Timelines for submitting NAMDRP reports</li> <li>• Tracking procedures for NAMDRP reports</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 6 and 14 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 10 (OPNAVINST 4790.2)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the Naval Aviation Maintenance Discrepancy Reporting Program. These questions will include all aspects of the program, including, but not limited to, program requirements, submitting reports, tracking reports, forms, report types, and timelines.

## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Manage the Departmental Safety Program
Knowledge you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements of the Departmental Safety Program</li> <li>• Responsibilities of the Quality Assurance division in the safety program</li> <li>• Responsibilities of the work center supervisor in the safety program</li> <li>• Responsibilities of the chain of command in the safety program</li> <li>• Identification of safety hazards, unsafe conditions, and unsafe work practices</li> <li>• Training required to support the safety program</li> <li>• Personal protective equipment (PPE) requirements</li> <li>• Safety poster requirements</li> <li>• Procedures for preventing accidents</li> <li>• Procedures for reporting accidents</li> </ul>
References you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapters 2 and 5 (NAVEDTRA 12017)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 2, 4, 11, 14, 15, and 16 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapters 2, 5, 6, 7, 8, 10, 13, 17, 19, and 20 (OPNAVINST 4790.2)</li> <li>• Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume I, Sections A and B (OPNAVINST 5100.19)</li> </ul>

	<ul style="list-style-type: none"> <li>• Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume II, Section C (OPNAVINST 5100.19)</li> <li>• Navy Occupational Safety and Health Program Manual, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 18, 19, 20, 21, 23, and 24 (OPNAVINST 5100.23D)</li> <li>• Support Equipment Basic Handling &amp; Safety Manual, Work Packages 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, and 016 (NAVAIR 00-80T-96)</li> <li>• The Naval Aviation Safety Program, Chapters 1, 2, 3, 4, 5, 6, 7, 8, and 9 (OPNAVINST 3750.6)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about the Departmental Safety Program. These questions will include all aspects of the program, including, but not limited to, program requirements, responsibilities, hazards, unsafe conditions/practices, safety training, PPE, safety posters, accident prevention, and accident reporting.</p>

## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Quality Assurance</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform Quality Assurance (QA) Audits
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements of the Quality Assurance Audit Program</li> <li>• Responsibilities under the Quality Assurance Audit Program</li> <li>• Audit types</li> <li>• Operation of programs audited by QA</li> <li>• Use of the Computerized Self-Evaluation Checklist (CSEC)</li> <li>• Information contained in the CSEC</li> <li>• Procedures for performing QA audits</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume I, Chapter 14 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 8 (OPNAVINST 4790.2)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about performing quality assurance audits. These questions will include all aspects of the Quality Assurance Audit Program, including, but not limited to, program requirements, responsibilities, audit types, audited programs, CSEC, and audit procedures.



## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Management</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Direct Divisional NAMP Programs
Knowledge you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Operation of the Corrosion Prevention and Control Program</li> <li>• Operation of the Support Equipment Operator Training and Licensing Program</li> <li>• Operation of the Hydraulic Contamination Control Program</li> <li>• Operation of the Support Equipment Tire and Wheel Safety Program</li> <li>• Operation of the Collateral Duty Inspector Program</li> <li>• Operation of the Aviation Gas Free Engineering Program</li> <li>• Operation of the Foreign Object Damage Prevention Program</li> <li>• Operation of the Electrostatic Discharge Program</li> <li>• Operation of the Miniature/Microminiature Program</li> <li>• Operation of the Aviators' Breathing Oxygen Surveillance Program</li> <li>• Operation of the Naval Aviation Maintenance Discrepancy Reporting Program</li> <li>• Operation of the Departmental Safety Program</li> <li>• Operation of the Quality Assurance Audit Program</li> <li>• Operation of the Maintenance Training Program</li> <li>• Operation of the Technical Directive Compliance Program</li> <li>• Operation of the Tool Control Program</li> <li>• Operation of the Support Equipment Planned Maintenance System Program</li> </ul>

	<ul style="list-style-type: none"> <li>• Operation of the Naval Aviation Metrology and Calibration Program</li> <li>• Operation of the Hazardous Material Control and Management Program</li> <li>• Operation of the Individual Component Repair List Program</li> </ul>
<p><i>References</i> you should study to gain the knowledge you need to perform this skill:</p>	<ul style="list-style-type: none"> <li>• Aircraft Fuel Cells and Tanks, Section 2 (NAVAIR 01-1A-35)</li> <li>• Aircraft Weapons Systems Cleaning and Corrosion Control, Chapters 1, 2, 3, 4, 5, 6, 7, 8, and 9, Appendixes A, B, C, and D and Safety Summary (NAVAIR 01-1A-509)</li> <li>• Aviation Hose and Tube Manual, Sections 5, 6, and Safety Summary (NAVAIR 01-1A-20)</li> <li>• Aviation Hydraulics Manual, Sections 1, 2, 3, 4, 5, 7, 8, 9, 10, and 11 (NAVAIR 01-1A-17)</li> <li>• Aviation Maintenance Ratings, Chapter 6 (NAVEDTRA 12017)</li> <li>• Avionics Cleaning and Corrosion Prevention/Control, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10, Appendixes A, B, and C, and Safety Summary (NAVAIR 16-1-540)</li> <li>• Hazardous Materials User's Guide, Introduction and Groups 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, and 19</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 2, 4, 6, 10, 11, 12, 14, 15, 16, 17, 21 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume III, Chapters 3, 9 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapters 2, 5, 6, 7, 8, 10, 11, 12, 13, 14, 17, 18, 19, 20, 21, 22, 23 (OPNAVINST 4790.2)</li> <li>• Navy Electricity and Electronics Training Series, Module 14, Chapters 2 and 3 (NAVEDTRA 172-14-00-98)</li> <li>• Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume I, Sections A and B (OPNAVINST 5100.19)</li> </ul>

	<ul style="list-style-type: none"> <li>• Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume II, Section C (OPNAVINST 5100.19)</li> <li>• Navy Occupational Safety and Health Program Manual, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 18, 19, 20, 21, 23, and 24 (OPNAVINST 5100.23D)</li> <li>• Support Equipment Basic Handling &amp; Safety Manual, Work Packages 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, and 016 (NAVAIR 00-80T-96)</li> <li>• Support Equipment Cleaning, Preservation, and Corrosion Control, Sections 1, 2, 3, 4, 5, 6, 7, 8, and Appendixes A and B (NAVAIR 17-1-125)</li> <li>• Support Equipment Tire and Wheel Assemblies, Work Packages 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, and 012 (NAVAIR 17-1-129)</li> <li>• Technical Manual of Oxygen/Nitrogen Cryogenic Systems, Sections 4, 5, and 7 (NAVAIR 06-30-501)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of all divisional NAMP programs, including, but not limited to, requirements, procedures, operation, purposes, and documentation.</p>

## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Management</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Direct Incorporation of Technical Directives
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Definition and technical directive codes of a Support Equipment Change (SEC) and a Support Equipment Bulletin (SEB)</li> <li>• Types, amendments, and revisions of technical directives</li> <li>• Priority designators assigned to technical directives</li> <li>• Responsibilities for determining applicability, initiating a maintenance action, and procuring parts for technical directive incorporation</li> <li>• Identification of the proper maintenance level for technical directive incorporation</li> <li>• Record entry requirements for technical directives</li> <li>• Technical directive reports/lists</li> <li>• Procedures for documenting technical directives</li> <li>• Procedures for identifying technical directive requirements for an item of equipment</li> <li>• Procedures for incorporating a technical directive</li> <li>• Procedures for verifying a technical directive</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 2 (NAVEDTRA 12017)</li> <li>• Naval Air Systems Command Technical Directives System, Sections 1, 2, 3, 4, and 5 and Appendixes A, B, C, and D (NAVAIR 00-25-300)</li> <li>• Naval Air Systems Command Technical Manual Program, Work Package 015 (NAVAIR 00-25-100)</li> </ul>

	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 10, 12, 13, and 15 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume III, Chapters 3, 6, and 9 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapters 11 and 18 and Appendix A (OPNAVINST 4790.2)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of technical directive incorporation, including identification, codes, types, amendments, revisions, priority designators, responsibilities, maintenance levels, record entries, reports, lists, documentation, and verification.</p>

## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>Management</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Manage Maintenance Documentation and Data
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements for documentation of maintenance actions</li> <li>• Codes used for documenting maintenance actions</li> <li>• Use and identification of maintenance data system and NALCOMIS reports</li> <li>• Procedures for initiating and signing off documentation of maintenance actions</li> <li>• Procedures for performing workload verification</li> <li>• Procedures for documenting and ordering repair parts</li> <li>• Procedures for reviewing status of parts on order</li> <li>• Procedures for requesting the manufacture of material</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Assignment and Application of Uniform Source, Maintenance, and Recoverability Codes, Body and Enclosures 2, 3, 7, and 8 (NAVAIRINST 4423.11)</li> <li>• Aviation Maintenance Ratings, Chapter 1 (NAVEDTRA 12017)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 12 and 15 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume III, Chapters 2, 3, 4, 5, 6, 7, 8, 9 and Appendixes E, G, H, I, J, K, L, M, N, O, P, Q, R, and S (OPNAVINST 4790.2)</li> <li>• Naval Supply Procedures, Volume I, Afloat Supply, Chapters 2 and 3 (NAVSUP P-485)</li> </ul>

	<ul style="list-style-type: none"> <li>• Naval Supply Procedures, Volume II, Supply Appendices, Appendixes 1, 2, 4, and 6 (NAVSUP P-485)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of maintenance documentation and data, including requirements, codes, reports, workload verification, parts ordering/tracking, and requests for manufacture of material.</p>

## Advancement Handbook for AS1

General AS <i>Skill Area</i>	<b>General Administration</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Update Technical Publications
Knowledge you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Use of publication numbering system</li> <li>• Format of technical publications</li> <li>• Identification of publication changes/revisions</li> <li>• Publications used to locate publication numbers and publication stock numbers</li> <li>• Procedures for page-checking publications</li> <li>• Procedures for incorporating changes in publications</li> <li>• Procedures for arrangement and numbering publication binders</li> <li>• Procedures for submitting a Technical Publications Deficiency Report (TPDR)</li> <li>• Responsibilities of the dispersed technical publications librarian</li> <li>• Timelines for incorporation of changes/revisions</li> <li>• Procedures for processing the Change Entry Certification Record (CECR)</li> <li>• Procedures for ordering replacement publications</li> <li>• Procedures for adding civilian/contractor publications to the dispersed library</li> </ul>
References you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 2 (NAVEDTRA 12017)</li> <li>• Naval Air Systems Command Technical Manual Program, Work Packages 003, 005, 007, 009, 010, 011, 012, 014, 015, 017, 019, 020, 022, and 023 (NAVAIR 00-25-100)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapter 14 (OPNAVINST 4790.2)</li> </ul>



<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of technical publications and publication updating, including numbering, format, changes, revisions, incorporation timelines, page-checking, change incorporation, binders, TPDRs, dispersed technical publications librarian, CECRs, publication ordering, and civilian/contractor publications.</p>
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## Part 4

### Advancement Handbook for ASC

## Advancement Handbook for ASC

General AS <i>Skill Area</i>	<b>Technical Administration</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain Aeronautical Equipment Service Records (AESR)
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Forms required in an AESR</li> <li>• Entries required on each form of the AESR</li> <li>• Authorized signatures in an AESR</li> <li>• Screening requirements for an AESR</li> <li>• Equipment requiring an AESR</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 10 and 13 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapters 11, 12, and 14 (OPNAVINST 4790.2)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of the AESR, including sections, information required in each section, authorized signatures, screening requirements, and equipment requiring an AESR.

## Advancement Handbook for ASC

General AS <i>Skill Area</i>	<b>Technical Administration</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor and Update the Support Equipment Standardization System (SESS)
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Purpose of SESS</li> <li>• Capabilities of SESS</li> <li>• Information tracked by SESS</li> <li>• Responsibilities for updating SESS</li> <li>• Maintenance scheduling procedures</li> <li>• Tracking and scheduling procedures for maintenance actions</li> <li>• Procedures for preparing status reports</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 11 and 14 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume III, Chapter 8 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 18 (OPNAVINST 4790.2)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about monitoring and updating the Support Equipment Standardization System, including purpose of SESS, capabilities of SESS, information tracked by SESS, responsibilities for updating SESS, maintenance scheduling procedures, maintenance action tracking/scheduling, and status reports.

## Advancement Handbook for ASC

General AS <i>Skill Area</i>	<b>Technical Administration</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor Calibration Requirements
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements of the Metrology and Calibration Program</li> <li>• Responsibilities in the Metrology and Calibration Program</li> <li>• Procedures for determining the requirements for calibration of an item of equipment</li> <li>• Calibration requirements during acceptance and transfer inspections</li> <li>• Report formats used for tracking calibration requirements</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapter 10 and Appendix C (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapters 18 and 19 (OPNAVINST 4790.2)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the Metrology and Calibration Program. These questions will include all aspects of the program, including, but not limited to, program requirements, responsibilities, procedures, and report formats.

## Advancement Handbook for ASC

General AS <i>Skill Area</i>	<b>Technical Administration</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor Technical Directive Compliance
Knowledge you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Definition and technical directive codes of a Support Equipment Change (SEC) and a Support Equipment Bulletin (SEB)</li> <li>• Types, amendments, and revisions of technical directives</li> <li>• Priority designators assigned to technical directives</li> <li>• Responsibilities for determining applicability, initiating a maintenance action, and procuring parts for technical directive incorporation</li> <li>• Identification of the proper maintenance level for technical directive incorporation</li> <li>• Record entry requirements for technical directives</li> <li>• Technical directive reports/lists</li> <li>• Procedures for documenting technical directives</li> <li>• Procedures for identifying technical directive requirements for an item of equipment</li> <li>• Procedures for incorporating a technical directive</li> <li>• Procedures for verifying a technical directive</li> </ul>
References you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Aviation Maintenance Ratings, Chapter 2 (NAVEDTRA 12017)</li> <li>• Naval Air Systems Command Technical Directives System, Sections 1, 2, 3, 4, and 5 and Appendixes A, B, C, and D (NAVAIR 00-25-300)</li> <li>• Naval Air Systems Command Technical Manual Program, Work Package 015 (NAVAIR 00-25-100)</li> </ul>

	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 10, 12, 13, and 15 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume III, Chapters 3, 6, and 9 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapters 11 and 18 and Appendix A (OPNAVINST 4790.2)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of technical directive incorporation, including identification of technical directives, technical directive codes, types, amendments, revisions, priority designators, responsibilities, maintenance levels, record entries, reports, lists, documentation, and verification.</p>

## Advancement Handbook for ASC

General AS <i>Skill Area</i>	<b>Technical Administration</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Coordinate Support Equipment Requirements, Procurement, and Rework
Knowledge you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements and responsibilities under the Aircraft Maintenance Material Readiness List (AMMRL) Program</li> <li>• Procedures for determining support equipment requirements</li> <li>• Purpose and use of the Individual Material Readiness List (IMRL)</li> <li>• Procedures for submitting IMRL revision requests</li> <li>• Requirements for performing IMRL inventories</li> <li>• Procedures for performing IMRL inventories</li> <li>• Procedures for coordinating support equipment requirements between divisions and tenant commands</li> <li>• Use and updating of the Local Asset Management System (LAMS)</li> <li>• Procedures for requesting rework of support equipment</li> <li>• Procedures for coordinating and monitoring rework of support equipment</li> </ul>
References you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Air Systems Command Aircraft Maintenance Material Readiness List Program, Body and Enclosures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13 (NAVAIRINST 13650.1)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 5, 7, 10, 11, 12, 15, and 16 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume III, Chapter 9 (OPNAVINST 4790.2)</li> </ul>



	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume V, Chapter 18 (OPNAVINST 4790.2)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about coordinating support equipment requirements, procurement, and rework at the divisional, departmental, command, and fleet levels. These questions will include all aspects of the AMMRL program, including, but not limited to, program requirements, fleet/command/departmental/divisional support equipment requirements, IMRL, IMRL revisions, IMRL inventories, LAMS, and rework.</p>

## Advancement Handbook for ASC

General AS <i>Skill Area</i>	<b>Technical Administration</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Review and Update the Aviation Consolidated Allowance List (AVCAL)
Knowledge you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Purpose of the AVCAL</li> <li>• Responsibilities for maintaining the AVCAL</li> <li>• Requirements for AVCAL review</li> <li>• Procedures for AVCAL review</li> </ul>
References you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 11, 12, and 18 (OPNAVINST 4790.2)</li> <li>• Naval Supply Procedures, Volume I, Afloat Supply, Chapter 2 (NAVSUP P-485)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about reviewing the Aviation Consolidated Allowance List, including purpose of the AVCAL, responsibilities, review requirements, and review procedures.

## Advancement Handbook for ASC

General AS <i>Skill Area</i>	<b>Safety</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Conduct Incident and Accident Investigations
Knowledge you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Requirements for submitting accident/incident/mishap reports</li> <li>• Responsibilities of accident/incident investigators</li> <li>• Terms to be used on mishap reports</li> <li>• Mishap and injury classifications</li> <li>• Procedures for submitting accident/incident/mishap reports</li> <li>• Procedures for investigating accident/incident/mishap reports</li> </ul>
References you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• The Naval Aviation Safety Program, Chapters 1, 2, 3, 4, 5, 6, 7, 8, and 9 (OPNAVINST 3750.6)</li> <li>• Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Chapter A6 (OPNAVINST 5100.19)</li> <li>• Navy Occupational Safety and Health Program Manual, Chapter 14 (OPNAVINST 5200.23D)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about incident, accident, and mishap reports and investigations. These questions will include all aspects of mishap reporting/investigating, including, but not limited to, requirements for submitting reports, investigator responsibilities, report terms, procedures for submitting reports, and investigation procedures.

## Advancement Handbook for ASC

General AS <i>Skill Area</i>	<b>Management</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Manage Divisional NAMP Programs
Knowledge you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Operation of the Corrosion Prevention and Control Program</li> <li>• Operation of the Support Equipment Operator Training and Licensing Program</li> <li>• Operation of the Hydraulic Contamination Control Program</li> <li>• Operation of the Support Equipment Tire and Wheel Safety Program</li> <li>• Operation of the Collateral Duty Inspector Program</li> <li>• Operation of the Aviation Gas Free Engineering Program</li> <li>• Operation of the Foreign Object Damage Prevention Program</li> <li>• Operation of the Electrostatic Discharge Program</li> <li>• Operation of the Miniature/Microminiature Program</li> <li>• Operation of the Aviators' Breathing Oxygen Surveillance Program</li> <li>• Operation of the Naval Aviation Maintenance Discrepancy Reporting Program</li> <li>• Operation of the Departmental Safety Program</li> <li>• Operation of the Quality Assurance Audit Program</li> <li>• Operation of the Maintenance Training Program</li> <li>• Operation of the Technical Directive Compliance Program</li> <li>• Operation of the Tool Control Program</li> <li>• Operation of the Support Equipment Planned Maintenance System Program</li> </ul>

	<ul style="list-style-type: none"> <li>• Operation of the Naval Aviation Metrology and Calibration Program</li> <li>• Operation of the Hazardous Material Control and Management Program</li> <li>• Operation of the Individual Component Repair List Program</li> </ul>
<p><i>References</i> you should study to gain the knowledge you need to perform this skill:</p>	<ul style="list-style-type: none"> <li>• Aircraft Fuel Cells and Tanks, Section 2 (NAVAIR 01-1A-35)</li> <li>• Aircraft Weapons Systems Cleaning and Corrosion Control, Chapters 1, 2, 3, 4, 5, 6, 7, 8, and 9, Appendixes A, B, C, and D and Safety Summary (NAVAIR 01-1A-509)</li> <li>• Aviation Hose and Tube Manual, Sections 5, 6, and Safety Summary (NAVAIR 01-1A-20)</li> <li>• Aviation Hydraulics Manual, Sections 1, 2, 3, 4, 5, 7, 8, 9, 10, and 11 (NAVAIR 01-1A-17)</li> <li>• Aviation Maintenance Ratings, Chapter 6 (NAVEDTRA 12017)</li> <li>• Avionics Cleaning and Corrosion Prevention/Control, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10, Appendixes A, B, and C, and Safety Summary (NAVAIR 16-1-540)</li> <li>• Hazardous Materials User's Guide, Introduction and Groups 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, and 19</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 2, 4, 6, 10, 11, 12, 14, 15, 16, 17, 21 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume III, Chapters 3, 9 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume V, Chapters 2, 5, 6, 7, 8, 10, 11, 12, 13, 14, 17, 18, 19, 20, 21, 22, 23 (OPNAVINST 4790.2)</li> <li>• Navy Electricity and Electronics Training Series, Module 14, Chapters 2 and 3 (NAVEDTRA 172-14-00-98)</li> <li>• Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume I, Sections A and B (OPNAVINST 5100.19)</li> </ul>

	<ul style="list-style-type: none"> <li>• Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume II, Section C (OPNAVINST 5100.19)</li> <li>• Navy Occupational Safety and Health Program Manual, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 18, 19, 20, 21, 23, and 24 (OPNAVINST 5100.23D)</li> <li>• Support Equipment Basic Handling &amp; Safety Manual, Work Packages 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, and 016 (NAVAIR 00-80T-96)</li> <li>• Support Equipment Cleaning, Preservation, and Corrosion Control, Sections 1, 2, 3, 4, 5, 6, 7, 8, and Appendixes A and B (NAVAIR 17-1-125)</li> <li>• Support Equipment Tire and Wheel Assemblies, Work Packages 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, and 012 (NAVAIR 17-1-129)</li> <li>• Technical Manual of Oxygen/Nitrogen Cryogenic Systems, Sections 4, 5, and 7 (NAVAIR 06-30-501)</li> </ul>
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of all divisional NAMP programs, including, but not limited to, requirements, procedures, operation, purposes, and documentation.</p>

## Advancement Handbook for ASC

General AS <i>Skill Area</i>	<b>General Administration</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Review and Track Supply Requests
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Information required to complete a requisition</li> <li>• Forms used for ordering parts</li> <li>• Reports used for tracking supply requisitions</li> <li>• Force Activity Designators (FAD) used for determining supply priority</li> <li>• Project/priority codes used for ordering support equipment parts</li> <li>• Source, Maintenance, and Recoverability (SM&amp;R) codes assigned to support equipment components</li> <li>• Advice codes used on requisitions</li> <li>• Status codes for outstanding requisitions</li> <li>• Procedures for processing, reviewing, and tracking supply requisitions</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Assignment and Application of Uniform Source, Maintenance, and Recoverability Codes, Body and Enclosures 2, 3, 7, and 8 (NAVAIRINST 4423.11)</li> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 12, 15, and 18 (OPNAVINST 4790.2)</li> <li>• Naval Aviation Maintenance Program, Volume III, Chapters 5 and 8 (OPNAVINST 4790.2)</li> <li>• Naval Supply Procedures, Volume I, Afloat Supply, Chapters 2 and 3 (NAVSUP P-485)</li> <li>• Naval Supply Procedures, Volume II, Supply Appendices, Appendixes 1, 2, 4, and 6 (NAVSUP P-485)</li> </ul>

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about reviewing and tracking supply requests, including information contained on a requisition, requisition forms, reports for requisition tracking, FADs, project codes, priority codes, SM&amp;R codes, advice codes, status codes, and procedures for processing, reviewing, and tracking supply requisitions.</p>
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## Advancement Handbook for ASC

General AS <i>Skill Area</i>	<b>General Administration</b>
A <i>skill</i> you are expected to perform from the General Skill Area above:	Survey Equipment
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> <li>• Reasons for surveying equipment</li> <li>• Forms used for equipment surveys</li> <li>• Procedures for surveying equipment</li> <li>• Authorized signatures required on survey forms</li> </ul>
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> <li>• Naval Aviation Maintenance Program, Volume I, Chapters 12 and 16 (OPNAVINST 4790.2)</li> <li>• Naval Supply Procedures, Volume I, Afloat Supply, Chapters 5 (NAVSUP P-485)</li> </ul>
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about surveying equipment, including reasons for surveying equipment, forms used, survey procedures, and authorized signatures.

## Appendix 1

### References Used in This Advancement Handbook

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS3</b>	A1-580AB-MMI-200	Pneumatic and Shaft Power Gas Turbine Engine. Model GTCP100-82	Work Packages 002, 003, 004, 006, 007, 008, 009, 010, 011, 012, & 013	Note 1
	AG-180AO-MMM-000	Air Conditioner, Aircraft Ground Cooling, A/M32C-21	Work Packages 003 & 008	Note 1
	AG-310DO-OMM-000	Aircraft Crash Handling and Salvage Crane, A/S32A-36	Work Packages 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 021, 023, 024, 025, 026, 027, 028, 029, 030, 031, & 033	Note 1
	AG-420BO-S22-000	Manual Bomb Hoist, HLU-288/E	Work Package 001	Note 1
	AG-750AO-OMM-000	Nitrogen Servicing Unit, A/M26U-4	Work Packages 003, 004, 005, 006, 007, 008, 009, 010, & 011	Note 1
	HMUG	Hazardous Materials Users Guide	Introduction, Groups 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, & 19	Note 4

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS3 (cont)</b>	NAVAIR 00-25-100	Naval Air Systems Command Technical Manual Program	Work Packages 003, 005, 007, 009, 010, 011, 012, 014, 015, 017, 019, 020, 022, & 023	Note 1
	NAVAIR 00-25-300	Naval Air Systems Command Technical Directives System	Sections 2, 3, & 5	Note 1
	NAVAIR 00-80T-96	Support Equipment Basic Handling & Safety Manual	Work Packages 003, 006, 008, 009, 010, 012, 013, 014, 015, & 016	Note 1
	NAVAIR 01-1A-17	Aviation Hydraulics Manual	Sections 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, & Safety Summary	Note 1
	NAVAIR 01-1A-20	Aviation Hose and Tube Manual	Sections 2, 4, 6, 7, & 9	Note 1
	NAVAIR 01-1A-8	Structural Hardware	Sections 2, 3, 4, 5, 6, 7, 8, 9, 11, & 12	Note 1
	NAVAIR 06-30-501	Technical Manual of Oxygen/ Nitrogen Cryogenic Systems	Chapters 2, 4, 5, & 7	Note 1
	NAVAIR 15-01-500	Preservation of Naval Aircraft	Section 3	Note 1
	NAVAIR 16-1-540	Avionics Cleaning and Corrosion Prevention/ Control	Sections 2, 3, 4, 5, & 7	Note 1
	NAVAIR 17-1-114	Inspection and Proofload Testing of Lifting Slings for Aircraft and Related Components	Work Packages 002, 003, 004, & 005	Note 1

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS3 (cont)</b>	NAVAIR 17-1-116	Repair and Assembly of External Power Cables and Attachable Plugs	Sections 2, 3, 4, & 5	Note 1
	NAVAIR 17-1-125	Support Equipment Cleaning, Preservation, and Corrosion Control	Sections 2, 3, 4, 5, 6, 7, 8, 9, Appendixes A & B	Note 1
	NAVAIR 17-1-129	Support Equipment Tire and Wheel Assemblies	Work Packages 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, & 012	Note 1
	NAVAIR 17-15BA-241	Dummy Load, Electrical, DA-675/MSM	Work Packages 003, 004, 005, & 006	Note 1
	NAVAIR 17-15BAD-1	Naval Aircraft and Naval Aircraft Support Equipment Storage Batteries	Chapters 2, 3, & Safety Summary	Note 1
	NAVAIR 17-15BF-89	Portable Hydraulic Power Supply, A/M27T-5	Work Packages 003, 005, 006, 008, 009, 010, 011, 012, 014, 016, 017, 018, 019, 020, 021, 023, & 024	Note 1
	NAVAIR 17-15BF-90	Test Stand, Aircraft Hydraulic Systems, A/M27T-6	Work Package 001	Note 1
	NAVAIR 17-15BF-91	Portable Hydraulic Power Supply, A/M27T-7	Work Packages 003, 005, 006, 007, 008, 009, 011, 014, 015, 016, 017, & 018	Note 1

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS3 (cont)</b>	NAVAIR 19-10-504	Portable Floodlight Set, A/M42M-2	Work Packages 003, 005, 006, 008, & 013	Note 1
	NAVAIR 19-105B-12	Pneumatic Power Gas Turbine Engine, Model GTC85-72 and GTC85-76	Sections 1, 2, 3, 4, & 5	Note 1
	NAVAIR 19-105B-59	Jet Aircraft Start Unit, A/M47A-4	Work Packages 003, 004, 005, 006, 007, & 008	Note 1
	NAVAIR 19-105B-60	GTE (GTCP-100) Tractor Mounted Enclosure, A/S47A-1	Work Packages 003, 004, 005, 006, & 007	Note 1
	NAVAIR 19-1-157	Aircraft Towing Tractor, A/S32A-32	Work Packages 003, 005, 006, 007, 008, 010, 011, 012, 013, 014, 015, 016, 018, 019, 020, & 021	Note 1
	NAVAIR 19-15BA-46	Bomb Hoisting Unit, HLU-196B/E	Sections 1, 2, & 3	Note 1
	NAVAIR 19-25-514	Fire Fighting Vehicle, A/S32P-25	Work Packages 003, 006, 007, 008, 010, 011, 013, 014, 015, 016, 018, 019, 020, 021, 022, 023, 024, 025, 026, & 028	Note 1

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS3 (cont)</b>	NAVAIR 19-25B-17	Nitrogen Servicing Handtruck, Type A/M34M-2	Work Packages 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, & 020	Note 1
	NAVAIR 19-25D-26	Servicing Trailer, Liquid Oxygen, Low Loss, Closed Loop, Type TMU-70/M	Sections 1, 2, 3, & 4	Note 1
	NAVAIR 19-25D-31	Oxygen Servicing Unit, A/U26U-1	Work Packages 003, 004, 006, 007, 008, 009, 010, 011, & 012	Note 1
	NAVAIR 19-25G-16	Aircraft Maintenance Crane, Wheel Mounted, 8 ½ Ton, A/S32M-14	Work Packages 003, 005, 006, 013, 014, 015, 018, 025, 034, 035, 036, 037, 039, 040, 041, 042, 043, 044, 045, 046, 047, 048, 052, 054, 055, 056, 057, 058, 059, 060, 061, 062, 063, 064, 065, 067, 068, 069, & 070	Note 1

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS3 (cont)</b>	NAVAIR 19-25G-19	Aircraft Crash Handling and Salvage Crane, A/S32A-35	Work Packages 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 022, 023, 029, 030, 031, 032, & 034	Note 1
	NAVAIR 19-25G-20	Aircraft Utility Crane, A/S32A-44	Work Packages 003, 004, 005, & 006	Note 1
	NAVAIR 19-35-17	Nitrogen Cylinder, Portable, 3000 PSI	Sections 1, 2,3, 4, & 5	Note 1
	NAVAIR 19-40-45	Aircraft Ground Support Equipment Towing Tractor, Type A/S32A-30	Work Packages 003, 005, 006, 008, 009, 010, 011, 012, 013, 014, 015, 016, 018, 020, 021, 022, 025, 026, 027, 028, 030, 031, 032, 033, & 034	Note 1
	NAVAIR 19-40-519	Aircraft Towing Tractor, A/S32A-37	Work Packages 003, 004, 005, 006, 007, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 022, 023, & 024	Note 1
	NAVAIR 19-40-520	Support Equipment & Aircraft Towing Tractor, A/S32A-30A	Sections 1, 2, 3, 4, & 5	Note 1

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS3 (cont)</b>	NAVAIR 19-40-521	Aircraft Towing Tractor, A/S32A-31A	Work Packages 003, 005, 006, 007, 010, 012, 013, 014, 016, 017, 018, 021, 023, 024, 025, 027, 028, & 029	Note 1
	NAVAIR 19-45-522	Aircraft Mid-Range Tow Vehicle, Type A/S32A-42	Chapters 1, 2, 3, 4, 5, 6, 7, 8, & 9	Note 1
	NAVAIR 19-45-10	Mobile Electric Power Plant, Model NC-2A	Sections 1, 2, 3, & 4	Note 1
	NAVAIR 19-45-19	Mobile Electric Power Plant, Type MMG-1A	Work Packages 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, & 020	Note 1
	NAVAIR 19-45-20	Power Plant, Mobile Electric, Models NC-10C and NC-10B-1	Sections 1, 2, 3, 4, & 5	Note 1
	NAVAIR 19-45-9	Power Plant, Mobile Electric, Models NC-8A and NC-8A-1	Sections 1, 2, 3, 4, & 5	Note 1
	NAVAIR 19-45D-32	Detroit Diesel Engines, Series 53 Service Manual	Sections 1, 2, 3, 4, 5, 6, 7, 12, 13, 14, & General Information	Note 1
	NAVAIR 19-60-87	Mobile Air Conditioning Unit, Model A/M32C-17	Sections 1, 2, 3, 4, & 5	Note 1
	NAVAIR 19-70-46	Index and Application Tables for Aircraft Jacks	Sections 1, 2, 3, & 4	Note 1



<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS3 (cont)</b>	NAVAIR 19-70-521	Aircraft Jacks, Various	Work Packages 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 022, 023, 024, 025, 026, & 027	Note 1
	NAVEDTRA 12017	Aviation Maintenance Ratings	Chapters 1, 2, 4, & 5	Note 1
	NAVEDTRA 12085	Use and Care of Hand Tools and Measuring Tools	Chapters 3, 5, 6, 7, 8, 9, 12, 17, 17, 19, 20, 21, 24, 26, 27, 28, 35, 37, 38, 52, & 53	Note 1
	NAVEDTRA 12199	Basic Machines	Chapters 1, 6, 7, 8, 9, 10, 11, 12, & 13	Note 1
	NAVEDTRA 12385	Aviation Support Equipment Technician 3 & 2	Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, & 13	Note 1
	NAVEDTRA 12964	Fluid Power	Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, & 12	Note 1
	NAVEDTRA 172-01-00-98	Navy Electricity and Electronics Training Series, Module 1	Chapters 1, 2, & 3	Note 1
	NAVEDTRA 172-02-00-98	Navy Electricity and Electronics Training Series, Module 2	Chapters 1, 2, 3, 4, & 5	Note 1
	NAVEDTRA 172-03-00-98	Navy Electricity and Electronics Training Series, Module 3	Chapters 1, 2, & 3	Note 1

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS3 (cont)</b>	NAVEDTRA 172-04-00-98	Navy Electricity and Electronics Training Series, Module 4	Chapters 1, 2, & 3	Note 1
	NAVEDTRA 172-05-00-98	Navy Electricity and Electronics Training Series, Module 5	Chapters 1, 2, & 3	Note 1
	NAVEDTRA 172-06-00-98	Navy Electricity and Electronics Training Series, Module 6	Chapter 3	Note 1
	NAVEDTRA 172-07-00-98	Navy Electricity and Electronics Training Series, Module 7	Chapters 1, 2, 3, & 4	Note 1
	NAVEDTRA 172-16-00-98	Navy Electricity and Electronics Training Series, Module 16	Chapters 1, 2, 3, & 4	Note 1
	NAVEDTRA 172-19-00-98	Navy Electricity and Electronics Training Series, Module 19	Chapter 1	Note 1
	NAVEDTRA 172-20-00-98	Navy Electricity and Electronics Training Series, Module 20	Chapter 1	Note 1
	NAVEDTRA 172-21-00-98	Navy Electricity and Electronics Training Series, Module 21	Chapters 1 & 2	Note 1
	OPNAVINST 4790.2	Naval Aviation Maintenance Program, Volume I	Chapters 10, 12, 13, 14, 15, & 16	Note 3
	OPNAVINST 4790.2	Naval Aviation Maintenance Program, Volume III	Chapters 2, 3, 5, 6, 7, 8, 9, Appendixes E, G, H, I, J, K, L, M, N, O, P, Q, R, & S	Note 3

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS3 (cont)</b>	OPNAVINST 4790.2	Naval Aviation Maintenance Program, Volume V	Chapters 5, 6, 7, 11, 13, 14, 17, 18, 20, & Appendix A	Note 3
	OPNAVINST 4790.4	Ships' Maintenance Material Management (3-M) Manual	Chapters 1, 2, 3, 4, 6, 7, 10, 13	Note 3
	OPNAVINST 5090.1	Environmental and Natural Resources Program Manual	Chapters 3, 6, 10, & 12	Note 3
	OPNAVINST 5100.19	Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume I	Chapter B3	Note 3
	OPNAVINST 5100.19	Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume II	Chapters C23	Note 3
	OPNAVINST 5100.23	Navy Occupational Safety and Health Program Manual	Chapter 7	Note 3
	SG340-AA-OMP-010	Flight Deck Scrubbers, Diesel Powered, Models 550DN and 550DN(C)	Chapters 1, 2, 3, & 4	Note 1
	AG-180AO-MMM-000	Air Conditioner, Aircraft Ground Cooling, A/M32C-21	Work Packages 003, 005, 006, 007, 008, 009, 010, 011, & 012	Note 1
	AG-310DO-OMM-000	Aircraft Crash Handling and Salvage Crane, A/S32A-36	Work Packages 003, 004, 005, 006, 009, 012, & 025	Note 1

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS2</b>	HMUG	Hazardous Materials Users Guide	Introduction, Groups 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, & 19	Note 4
	NAVAIR 00-25-100	Naval Air Systems Command Technical Manual Program	Work Packages 003, 005, 007, 009, 010, 011, 012, 014, 015, 017, 019, 020, 022, & 023	Note 1
	NAVAIR 00-80T-96	Support Equipment Basic Handling & Safety Manual	Work Packages 003, 010, & 016	Note 1
	NAVAIR 17-15BA-241	Dummy Load, Electrical, DA-675/MSM	Work Packages 003, 004, 005, & 006	Note 1
	NAVAIR 19-105B-59	Jet Aircraft Start Unit, A/M47A-4	Work Packages 003, 005, & 006	Note 1
	NAVAIR 19-25-514	Fire Fighting Vehicle, A/S32P-25	Work Packages 003, 005, 006, 007, 009, 010, 011, 017, 025, 026, 027, & 028	Note 1
	NAVAIR 19-25G-19	Aircraft Crash Handling and Salvage Crane, A/S32A-35	Work Packages 003, 004, 005, 006, 009, 018, & 019	Note 1
	NAVAIR 19-45-10	Mobile Electric Power Plant, Model NC-2A	Sections 1, 2, & 3	Note 1
	NAVAIR 19-45-18	TAU-2A Twinned Agent Fire Fighting System	Sections 1, 2, 3, 4, 5, & 6	Note 1

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS2 (cont)</b>	NAVAIR 19-45-19	Mobile Electric Power Plant, Type MMG-1A	Work Packages 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 017, 018, 019, & 020	Note 1
	NAVAIR 19-45-20	Power Plant, Mobile Electric, Models NC-10C and NC-10B-1	Sections 1, 2, 3, 4, & 5	Note 1
	NAVAIR 19-45-9	Power Plant, Mobile Electric, Models NC-8A and NC-8A-1	Sections 1, 2, 3, 4, & 5	Note 1
	NAVAIR 19-45D-32	Detroit Diesel Engines, Series 53 Service Manual	Section 7	Note 1
	NAVAIR 19-60-87	Mobile Air Conditioning Unit, Model A/M32C-17	Sections 1, 3, 4, & 5	Note 1
	NAVAIR 19-60-91	Refrigerant Recovery-Recycle System, ST-100/A-USN & ST-1000	Work Package 001	Note 1
	NAVAIRINST 13650.1	Naval Air Systems Command Aircraft Maintenance Material Readiness List Program	Body, Enclosures 7, & 12	Note 1
	NAVEDTRA 12017	Aviation Maintenance Ratings	Chapter 2, 5, & 6	Note 1
	NAVEDTRA 12385	Aviation Support Equipment Technician 3 & 2	Chapters 6, 7, 11, & 13	Note 1
	NAVEDTRA 172-01-00-98	Navy Electricity and Electronic Training Series, Module 1	Chapters 1 & 3	Note 1

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS2 (cont)</b>	NAVEDTRA 172-02-00-98	Navy Electricity and Electronic Training Series, Module 2	Chapters 1, 2, 3, 4, & 5	Note 1
	NAVEDTRA 172-03-00-98	Navy Electricity and Electronic Training Series, Module 3	Chapters 1, 2, & 3	Note 1
	NAVEDTRA 172-04-00-98	Navy Electricity and Electronic Training Series, Module 4	Chapters 1, 2, & 3	Note 1
	NAVEDTRA 172-05-00-98	Navy Electricity and Electronic Training Series, Module 5	Chapters 2 & 3	Note 1
	NAVEDTRA 172-06-00-98	Navy Electricity and Electronic Training Series, Module 6	Chapter 3	Note 1
	NAVEDTRA 172-07-00-98	Navy Electricity and Electronic Training Series, Module 7	Chapters 1, 2, 3, & 4	Note 1
	NAVEDTRA 172-16-00-98	Navy Electricity and Electronic Training Series, Module 16	Chapters 1, 2, 3, & 4	Note 1
	NAVEDTRA 172-19-00-98	Navy Electricity and Electronic Training Series, Module 19	Chapter 1	Note 1
	NAVEDTRA 172-20-00-98	Navy Electricity and Electronic Training Series, Module 20	Chapter 1	Note 1
	NAVEDTRA 172-21-00-98	Navy Electricity and Electronic Training Series, Module 21	Chapters 1 & 2	Note 1

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS2 (cont)</b>	NAVSUP P-485	Naval Supply Procedures, Volume II, Supply Appendices	Appendix 2	Notes 1 & 2
	OPNAVINST 4790.2	Naval Aviation Maintenance Program, Volume I	Chapters 10, 12, 14, 15, 16, & Appendix B	Note 3
	OPNAVINST 4790.2	Naval Aviation Maintenance Program, Volume III	Chapters 5, 6, 8, 9, Appendixes E, H, I, & O	Note 3
	OPNAVINST 4790.2	Naval Aviation Maintenance Program, Volume V	Chapters 17, 18, 20, & Appendix B	Note 3
	OPNAVINST 5090.1	Environmental and Natural Resources Program Manual	Chapter 3, 6, & 12	Note 3
	OPNAVINST 5100.19	Naval Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume I	Chapter C23	Note 3
	OPNAVINST 5100.19	Naval Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume II	Chapter B3	Note 3
	OPNAVINST 5100.23	Naval Occupational Safety and Health Program Manual	Chapter 7	Note 3
	HMUG	Hazardous Materials Users Guide	Introduction, Groups 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, & 19	Note 4

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS1</b>	NAVAIR 00-25-100	Naval Air Systems Command Technical Manual Program	Work Packages 003, 005, 007, 009, 010, 011, 012, 014, 015, 017, 019, 020, 022, & 023	Note 1
	NAVAIR 00-25-300	Naval Air Systems Command Technical Directives System	Sections 1, 2, 3, 4, 5, Appendixes A, B, C, & D	Note 1
	NAVAIR 00-80T-96	Support Equipment Basic Handling & Safety Manual	Work Packages 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, & 016	Note 1
	NAVAIR 01-1A-17	Aviation Hydraulics Manual	Sections 1, 2, 3, 4, 5, 7, 8, 9, 10, & 11	Note 1
	NAVAIR 01-1A-20	Aviation Hose and Tube Manual	Sections 5, 6, & Safety Summary	Note 1
	NAVAIR 01-1A-35	Aircraft Fuel Cells and Tanks	Section 2	Note 1
	NAVAIR 01-1A-509	Aircraft Weapons Systems Cleaning and Corrosion Control	Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, Appendixes A, B, C, D, & Safety Summary	Note 1
	NAVAIR 06-30-501	Technical Manual of Oxygen/ Nitrogen Cryogenic Systems	Sections 4, 5, & 7	Note 1
	NAVAIR 16-1-540	Avionics Cleaning and Corrosion Prevention/ Control	Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, Appendixes A, B, C, & Safety Summary	Note 1



<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS1 (cont)</b>	NAVAIR 17-1-125	Support Equipment Cleaning, Preservation, and Corrosion Control	Sections 1, 2, 3, 4, 5, 6, 7, 8, Appendixes A & B	Note 1
	NAVAIR 17-1-129	Support equipment Tire and Wheel Assemblies	Work Packages 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, & 012	Note 1
	NAVAIRINST 4423.11	Assignment and Application of Uniform Source, Maintenance, and Recoverability Codes	Body, Enclosures 2, 3, 7, & 8	Note 1
	NAVEDTRA 12017	Aviation Maintenance Ratings	Chapters 1, 2, 4, 5, & 6	Note 1
	NAVEDTRA 12385	Aviation Support Equipment Technician 3 & 2	Chapters 1, 8, & 10	Note 1
	NAVEDTRA 172-14-00-98	Navy Electricity and Electronics Training Series, Module 14	Chapters 2 & 3	Note 1
	NAVSUP P-485	Naval Supply Procedures, Volume I, Afloat Supply	Chapters 2 & 3	Notes 1 & 2
	NAVSUP P-485	Naval Supply Procedures, Volume II, Supply Appendices	Appendixes 1, 2, 4, & 6	Notes 1 & 2
	OPNAVINST 3750.6	The Naval Aviation Safety Program	Chapters 1, 2, 3, 4, 5, 6, 7, 8, & 9	Note 3
	OPNAVINST 4790.2	Naval Aviation Maintenance Program, Volume I	Chapters 2, 4, 6, 10, 11, 12, 13, 14, 15, 16, 17, & 21	Note 3

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>AS1 (cont)</b>	OPNAVINST 4790.2	Naval Aviation Maintenance Program, Volume III	Chapters 2, 3, 4, 5, 6, 7, 8, 9, Appendices E, G, H, I, J, K, L, M, N, O, P, Q, R, & S	Note 3
	OPNAVINST 4790.2	Naval Aviation Maintenance Program, Volume V	Chapters 2, 5, 6, 7, 8, 10, 11, 12, 13, 14, 17, 18, 19, 20, 22, 23, Appendixes A & B	Note 3
	OPNAVINST 5090.1	Environmental and Natural Resources Program Manual	Chapter 3, 5, 6, 7, 9, 10, 12, 16, 17, 18, & 19	Note 3
	OPNAVINST 5100.19	Naval Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume I	Sections A & B	Note 3
	OPNAVINST 5100.19	Naval Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume II	Section C	Note 3
	OPNAVINST 5100.23	Naval Occupational Safety and Health Program Manual	Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 18, 19, 20, 21, 23, & 24	Note 3
<b>ASC</b>	HMUG	Hazardous Materials Users Guide	Introduction, Groups 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, & 19	Note 4

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>ASC (cont)</b>	NAVAIR 00-25-100	Naval Air Systems Command Technical Manual Program	Work Package 015	Note 1
	NAVAIR 00-25-300	Naval Air Systems Command Technical Directives System	Sections 1, 2, 3, 4, 5, Appendixes A, B, C, & D	Note 1
	NAVAIR 00-80T-96	Support Equipment Basic Handling & Safety Manual	Work Packages 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, & 016	Note 1
	NAVAIR 01-1A-17	Aviation Hydraulics Manual	Sections 1, 2, 3, 4, 5, 7, 8, 9, 10, & 11	Note 1
	NAVAIR 01-1A-20	Aviation Hose and Tube Manual	Sections 5, 6, & Safety Summary	Note 1
	NAVAIR 01-1A-35	Aircraft Fuel Cells and Tanks	Section 2	Note 1
	NAVAIR 01-1A-509	Aircraft Weapons Systems Cleaning and Corrosion Control	Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, Appendixes A, B, C, D, & Safety Summary	Note 1
	NAVAIR 06-30-501	Technical Manual of Oxygen/ Nitrogen Cryogenic Systems	Sections 4, 5, & 7	Note 1
	NAVAIR 16-1-540	Avionics Cleaning and Corrosion Prevention/ Control	Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, Appendixes A, B, C, & Safety Summary	Note 1

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>ASC (cont)</b>	NAVAIR 17-1-125	Support Equipment Cleaning, Preservation, and Corrosion Control	Sections 1, 2, 3, 4, 5, 6, 7, 8, Appendixes A & B	Note 1
	NAVAIR 17-1-129	Support equipment Tire and Wheel Assemblies	Work Packages 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, & 012	Note 1
	NAVAIRINST 13650.1	Naval Air Systems Command Maintenance Material Readiness list program	Body, Enclosures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, & 13	Note 1
	NAVAIRINST 4423.11	Assignment and Application of Uniform Source, Maintenance, and Recoverability Codes	Body, Enclosures 2, 3, 7, & 8	Note 1
	NAVEDTRA 12017	Aviation Maintenance Ratings	Chapters 2, 5, & 6	Note 1
	NAVEDTRA 172-14-00-98	Navy Electricity and Electronics Training Series, Module 14	Chapters 2 & 3	Note 1
	NAVSUP P-485	Naval Supply Procedures, Volume I, Afloat Supply	Chapters 2, 3, & 5	Notes 1 & 2
	NAVSUP P-485	Naval Supply Procedures, Volume II, Supply Appendices	Appendixes 1, 2, 4, & 6	Notes 1 & 2
	OPNAVINST 3750.6	The Naval Aviation Safety Program	Chapters 1, 2, 3, 4, 5, 6, 7, 8, & 9	Note 3

<b>Rating</b>	<b>Short Title</b>	<b>Long Title</b>	<b>Chapters/ Paragraphs</b>	<b>Stocking Point</b>
<b>ASC (cont)</b>	OPNAVINST 4790.2	Naval Aviation Maintenance Program, Volume I	Chapters 2, 4, 5, 6, 7, 10, 11, 12, 13, 14, 15, 16, 17, 18, 21, & Appendix C	Note 3
	OPNAVINST 4790.2	Naval Aviation Maintenance Program, Volume III	Chapters 3, 5, 6, 8, & 9	Note 3
	OPNAVINST 4790.2	Naval Aviation Maintenance Program, Volume V	Chapters 2, 5, 6, 7, 8, 10, 11, 12, 13, 14, 17, 18, 19, 20, 21, 22, 23, & Appendixes A	Note 3
	OPNAVINST 5100.19	Naval Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume I	Sections A & B	Note 3
	OPNAVINST 5100.19	Naval Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, Volume II	Section C	Note 3
	OPNAVINST 5100.23	Naval Occupational Safety and Health Program Manual	Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 18, 19, 20, 21, 23, & 24	Note 3

**LEGEND:**

- Note 1 - To order, MILSTRIP to NAVICP PHILA or via INTERNET  
<http://www.nll.navsup.navy.mil/>
- Note 2 - NAVSUP P-600 (CD-ROM)
- Note 3 - INTERNET - <http://neds.nebt.daps.mil/>
- Note 4 - HMC&M/HMIS CD-ROM  
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